Grid Code **Modification Proposal Form** Email to gridcode@eirgrid.com	

Title of Modification Proposal: Future Arrangements for System Services (FASS) Reserve Products Review Modification Proposal

MPID (EirGrid Use Only): MPID 339

Date:	10/09/2025
Company Name:	EirGrid
Applicant Name:	Melissa Dunne
Email Address:	gridcode@eirgrid.com
Grid Code Version:	Grid Code Version 15
Grid Code Section(s) Impacted by Modification Proposal:	**Definitions** **A**: Aggregate Interconnector Ramp Rate; Automatic Generator Control (AGC) **C**: Capacity Adequacy; Committed Outage Programme; Contingency Reserve **E**: Energise; Extraordinary Governor Response **F**: Fast Frequency Response (FFR); Fast Frequency Response Downward (FFR Downward); Fast Frequency Response Upward (FFR Upward); Fault Disturbance; Frequency Deadband; Frequency Response System **G**: Governor Droop **I**: Interconnector Frequency Droop **L**: Limited Frequency Sensitive Mode – Over-Frequency (LFSM-O); Limited Frequency Sensitive Mode – Under-Frequency (LFSM-U) **O**: Operating Characteristics; Operating Margin; Operating Reserve; Operating Reserve Downward; Operating Reserve Upward; Operational Data **P**: Plant; Primary Frequency Control; Primary Operating Reserve (POR); Primary Operating Reserve Downward (POR Downward); Primary Operating Reserve Upward (POR Upward); Provisional Outage Programme **R**: Ramp Down Rate; Ramp Up Rate; Registered Operating Characteristics; Replacement Reserve (RR); Replacement Reserve Downward (RR Downward); Replacement Reserve Upward (RR Upward); Reserve Characteristics

	S: Secondary Frequency Control; Secondary Operating Reserve (SOR); Secondary Operating Reserve Downward (SOR Downward); Secondary Operating Reserve Upward (SOR Upward); Substitute Reserve; System Services Code; System Support Agreement **T**:Tertiary Operating Reserve; Tertiary Operating Reserve band 1 (TOR1); Tertiary Operating Reserve band 1 Downward (TOR1 Downward); Tertiary Operating Reserve band 1 Upward(TOR1 Upward); Tertiary Operating Reserve band 2 (TOR2); Tertiary Operating Reserve band 2 Downward (TOR2 Downward); Tertiary Operating Reserve band 2 Upward (TOR2 Upward); Tertiary Operating Reserve Downward (TOR Downward); Tertiary Operating Reserve Upward (TOR Upward); Transmission Outage Programme. **Clauses** **Planning Code**: PC.A4.3 **Connection Conditions**: CC.7.3.1.1 (u); CC.7.5.1.1 **Operating Conditions**: OC.2.2; OC.2.4.2; OC.2.4.3; OC.2.4.6; OC.2.6.3.4; OC.2.7.1; OC.2.7.4; OC.2.7.4.1; OC.2.7.4.1.1;OC.2.7.5; OC.2.7.5.1; OC.2.7.5.2; OC.4.2.1; OC.4.3.1.1; OC.4.3.3.2.1; OC.4.3.3.2.2; OC.4.3.3.2.3; OC.4.3.3.3.2; OC.4.3.4.1.10; OC.4.3.4.1.11; OC.4.3.4.2.2; OC.4.3.4.2.3; OC.4.6.1.2; OC.4.6.1.3; OC.4.6.1.4; OC.4.6.2.1; OC.4.6.3.1; OC.4.6.3.2.1; OC.4.6.3.2.2; OC.4.6.3.3; OC.4.6.3.3.1; OC.4.6.3.3.2; OC.4.6.3.4; OC.4.6.3.4.1; OC.4.6.3.5; OC.4.6.3.5.1; OC.4.6.3.5.2; OC.4.6.3.6; OC.4.6.3.7; OC.4.6.3.8; OC.4.6.4; OC.4.6.4.1; OC.4.6.4.2; OC.4.6.4.3; OC.4.6.4.5; OC.4.6.5.1.1; OC.4.6.5.2; OC.4.6.5.2.1; OC.4.6.5.3; OC.4.6.6; OC.4.6.6.1; OC.4.6.6.2; OC.7.1.11; OC.7.2.4.7.3; OC.7.2.4.7.4; OC.8.1.2; OC.8.2.3; OC.8.4.2; OC.8.6.2.5; OC.8.6.3; OC.8.7.3; OC.8.8.3; OC.8.8.3.1; OC.8.8.3.2; OC.8.8.3.3; OC.8.8.3.5; OC.8.8.4; OC.8.10.2; OC.8.10.3; OC.9.4.1; OC.10.1.1; OC.10.2.2; OC.10.4.4.1; OC.10.4.4.2; OC.10.5.5; OC.10.7.1.6; OC.10.7.1.7OC.10.7.2; OC.10.7.2.1; OC.10.7.2.2; OC.10.7.2.3; OC.10.7.2.4; OC.11.3 **Scheduling & Dispatch Code 1**: SDC1.1.1; SDC1.1.2; SDC1.4.3.1; SDC1.4.3.2; SDC1.4.3.3; SDC1.4.3.3A; SDC1.4.3.4; SDC1.4.3.5; SDC1.4.3.5A; SDC1.4.4.2; SDC1.4.4.6 (f); SDC1.4.6 b); SDC1.4.7.1; SDC1.4.7.2; SDC1.4.7.3; SDC1.4.7.7 a); SDC1.4.7.9; SDC1.4.7.10; SDC1 Appendix A Part 2 **Scheduling & Dispatch Code 2**: SDC2.1.1 (c); SDC2.1.2; SDC2.2; SDC2.4.1.1; SDC2.4.1.2; SDC2.4.1.3; SDC2.4.2.5; SDC2.4.2.6; SDC2.4.2.8 (d); SDC2.4.2.9; SDC2.4.2.10 (a) & (b) **Controllable PPM Power Station Grid Code Provisions**: PPM1.5.3.13; PPM1.5.3.14. **Acronyms List** FFR Fast Frequency Response RR Replacement Reserve SSC System Services Code

Modification Proposal Justification:

Background to this Modification Proposal

In line with EirGrid's commitments to deliver 2030 Renewable Energy Source (RES) targets and to align with the Clean Energy Package (CEP) and the Electricity Balancing Guideline (EBGL), the SEM Committee (SEMC) outlined in its High Level Design Decision on the System Services Future Arrangements, the need to move to a day-ahead auction-based procurement of reserve system services. In this decision paper, the SEMC also outlined the need to review the products to be procured in such an auction, and the development of a locational methodology that would support these objectives.

On 4th September 2024, the TSOs submitted the recommendations paper on the Day Ahead System Services Auction (DASSA) Product Review and Locational Methodology, under the Future Arrangements for System Services (FASS) project. The scope of this paper was the reserve system services. The TSOs received 17 responses to the consultation. Following a period of engagement with the Regulatory Authorities (RAs), the TSOs formally submitted their Recommendations Paper to SEMC.

In their decision paper (SEM-24-074) published October 2024, SEMC welcomed the analysis carried out by the TSOs, and considers the recommendations of technical products reasonable and well defined in terms of addressing system need. In particular, the SEMC welcomed the proposal to introduce downward reserve products, which will provide market participants with an incentive to provide greater stability to the system and is in line with EU standards. SEMC's decision was to approve the products recommended by the TSOs.

However, there are areas that SEMC requires the TSOs to give further consideration ahead of DASSA go-live. One of the areas is the interaction of the proposed services with the Grid Code, and this has driven both SONI and EirGrid to collaboratively develop Grid Code modification proposals directed at aspects of frequency control and reserve provision.

Focus & Purpose of this Modification Proposal

The FASS reserve products Grid Code review, and this subsequent modification proposal, focuses on Grid Code interactions with the procurement, control and provision of reserve system services. As part of a future review, the TSOs will be conducting an analysis to inform a modification proposal for non-reserve system services.

The purpose of this modification proposal is not to place any additional mandatory technical Grid Code requirements on users that are not already present in the Grid Code, or present in custom and practice for reserve providers. Its main purpose is to ensure that the Grid Code works cohesively and collaboratively with the System Services Market design (the DASSA for reserve system services) and the System Services Code, both currently under development, while also ensuring that Grid Code requirements related to frequency control and reserve provision are up to date and reflective of the changing system services landscape.

The Grid Code will continue to contain fundamental requirements for frequency control and reserve provision in order to protect the safety and security of the Transmission System and its users. For example, the Grid Code will continue to require transmission system users to be compliant with all pre-existing Grid Code requirements related to frequency and reserve, and for relevant users, will still require operation at all times under the control of a governor control system/frequency response system which may only be restricted in specific circumstances as outlined in the Grid Code, e.g. where the action is essential for the safety of personnel.

The System Services Code will contain the enhanced technical requirements, beyond those stated in the Grid Code, for user provision of reserve system services under FASS. The System Services Code will interact with the Grid Code as appropriate.

If any person or persons reviewing this modification proposal believes that a proposed change would in fact place a new unforeseen mandatory technical requirement on an individual user or cohort of users, that feedback should be highlighted to the TSO so the proposed change can be reviewed and amended where necessary.

Methodology for developing this Modification Proposal

As part of this Grid Code review, all definitions and clauses relevant to frequency control and the provision of reserve system services were reviewed and modified, as required. The rationale for each proposed change is provided in the table in the following section. Some categories of proposed changes include:

- New definitions are proposed for new reserve system services, with individual definitions for upward and downward direction response provision. This is because these services will be procured separately in the DASSA for the TSO to utilise as part of frequency control. Existing reserve system service definitions have been modified as appropriate to align with these arrangements and product definitions.
- Ensuring pre-existing requirements relevant to frequency control and reserve provision are applicable to all relevant users. These changes are not proposing new mandatory technical requirements but rather ensuring that the pre-existing requirements will apply to all relevant users in the scenario where they are providing reserve system services under the new competitive framework.
- Existing fundamental requirements for conventional generator reserve capability remain the same, but now indicate that the capability is specific to upward direction response. No new mandatory technical requirements have been developed for upward or downward reserve provision.

- Where the TSO is not currently utilising methods or metrics for frequency control referred to in the Grid Code, it has been made clear that the TSO may use them, but is not required to do so, e.g. Contingency Reserve.
- Proposed changes to clarify that reserve is used to address both frequency deviations within the normal operating range of the Transmission System, and larger frequency deviations outside of the normal operating range. The term '**Frequency** deviation' is used to refer to either scenario, but where specific reference to a significant disturbance is required or explicit, the term '**Frequency Event**' has been adopted.
- Legacy terminology and clauses around frequency control have been amended to reflect current custom and practice, and to provide greater clarity around what is expected of users and the TSO with respect to frequency control and reserve provision and utilisation.
- Ensuring that correct versions, or modified versions, of defined terms as per the Grid Code Glossary are used for general and user-specific requirements around frequency control and reserve provision. Where a relevant term was not present in the Glossary, a new definition has been proposed.
- Requirements that apply to multiple users have been consolidated into a lesser number of clauses so as to reduce repetition and to avoid the misunderstanding that a requirement may not apply to a specific user, when it does in fact apply to them under a separate, repetitive clause.
- Updates to Scheduling & Dispatch Codes, which are mirrored in both SONI and EirGrid Grid Code modification proposals, where possible.
- It is now the case that all Interconnectors connected to the island of Ireland are controllable by the respective TSOs, as opposed to dispatchable via dispatch instructions. As part of this modification proposal, text is proposed to ensure that all Grid Code requirements for Interconnectors that refer to dispatch instructions can also be considered a reference to these remote signals/control setpoints sent by the TSO, where relevant. This is pending a future, separate modification proposal to incorporate controllable unit requirements into the Scheduling & Dispatch Codes and throughout the Grid Code more clearly, ubiquitously and distinct from dispatchable units, again where relevant. Some changes have already been implemented here, e.g. reference to dispatch instructions and/or control setpoints, for clauses relevant to this modification proposal.
- Housekeeping changes, e.g. bolding of defined terms, unbolding of undefined terms, etc. are included in this modification proposal in so far as the change has some relevance to frequency control and/or reserve provision.

<u>When reviewing this modification proposal, please note that:</u>

- Under the Grid Code, the defined terms 'Ancillary Services' and 'System Services' are to be used interchangeably.
- Performance monitoring of reserve provision covered under OC.10, and related definitions in section OC.4.6.4, may need to be revisited pending development and approval of FASS performance monitoring processes and procedures.

A Table Outlining the Proposed Changes:

Grid Code Section	**Explanation of Proposed Change**	**Red Line Version Text** ***Deleted text in ~~strike-through-red font~~ and new text highlighted in blue font***	**Green Line Version Text**
Definition: **Aggregate Interconnector Ramp Rate**	Definition contains references to defined terms 'Ramp Up Rate' and 'Ramp Down Rate', however, these defined terms are specific to Generation Units.	The maximum ~~**Ramp Up Rate** for an **Interconnector** or maximum **Ramp Down Rate**~~ **Interconnector Ramp Rate** as determined by the **TSO**.	The maximum **Interconnector Ramp Rate** as determined by the **TSO**.

	Replacing these references with the Interconnector-specific defined term 'Interconnector Ramp Rate', defined as "The maximum rate of increase or decrease of the power transferred, in either flow direction, by an **Interconnector.**" Amended here, as opposed to in a housekeeping modification batch, as the definition has relevance to frequency control.		
Definition: **Automatic Generator Control (AGC)**	Addition of 'and/or Interconnector' as Interconnectors may be operated under AGC, and were mistakenly omitted here. Amended here, as opposed to in a housekeeping modification batch, as the definition has relevance to frequency control.	A control system installed between the **NCC** and a **Power Station** and/or **Interconnector** whereby MW set points can be adjusted remotely by the **TSO** to reflect the **Dispatch Instruction**.	A control system installed between the **NCC** and a **Power Station** and/or **Interconnector** whereby MW set points can be adjusted remotely by the **TSO** to reflect the **Dispatch Instruction**.
Definition: **Capacity Adequacy**	'Reserve' on its own is not a defined term under the Grid Code. Individual reserve system services are named and defined explicitly under the Grid Code.	When there is sufficient **Generation Capacity** to meet the **Demand** and ~~**Reserve**~~ reserve requirements.	When there is sufficient **Generation Capacity** to meet the **Demand** and reserve requirements.
Definition: **Committed Outage Programme**	Updating definition to reference DSUs, as relevant to section OC.2 Operational Planning. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or are likely to, affect their capability to provide Ancillary/System Services (OC.2.2 and OC.2.7).	A programme of **Outages** of ~~the **Generator's**~~ **Generation Units**, ~~and of~~ **Interconnectors**, and which may include **Demand Side Units**, prepared by the **TSO** pursuant to Section OC2 and covering year 1.	A programme of **Outages** of **Generation Units**, **Interconnectors**, and which may include **Demand Side Units**, prepared by the **TSO** pursuant to Section OC2 and covering year 1.

Definition: **Contingency Reserve**	The TSO is not actively utilising 'Contingency Reserve' at this point in time, but it is a possible metric for assessing Operating Margin/Capacity Adequacy and so may be used by the TSO. Likely to revisit this defined term when reviewing the Grid Code for FASS non-reserve products, due to overlap with ramping margin products. Bolding 'Availability', 'Generation' and 'Capacity' as defined terms under the Grid Code. Including 'transmission' with reference to 'Capacity ' to include Interconnectors. Including 'connected to the Transmission System' and similar to refer to non-synchronously connected users.	**Contingency Reserve** is the margin of ~~Availability~~ **Availability** over forecast **Demand**, which is required in the period from 24 hours ahead down to real time, to cover against uncertainties in ~~availability~~ **Availability** of ~~generation~~ **Generation** or transmission ~~capacity~~ **Capacity** and also against weather forecast and **Demand** forecast errors. **Contingency Reserve** is provided by ~~generation plant~~ **User Plant** which is not required to be **Synchronised** or connected to the **Transmission System**, but which must be held available to **Synchronise** or connect to the **Transmission System** within a limited time scale.	**Contingency Reserve** is the margin of **Availability** over forecast **Demand**, which is required in the period from 24 hours ahead down to real time, to cover against uncertainties in **Availability** of **Generation** or transmission **Capacity** and also against weather forecast and **Demand** forecast errors. **Contingency Reserve** is provided by **User Plant** which is not required to be **Synchronised** or connected to the **Transmission System**, but which must be held available to **Synchronise** or connect to the **Transmission System** within a limited time scale.
Definition: **Energise**	Updated to include all relevant user types, not just Generators. Amended here, as opposed to in a housekeeping modification batch, as this defined term is used in clauses relevant to this modification proposal in reference to users other than just Generators (e.g. OC.4.3.4.2.2).	The movement of any isolator, breaker or switch so as to enable **Active Power** and **Reactive Power** to be transferred to and from the **Facility** through the ~~**Generator's**~~ **User's Plant** and **Apparatus** and "**Energised**" and "**Energising**" shall be construed accordingly.	The movement of any isolator, breaker or switch so as to enable **Active Power** and **Reactive Power** to be transferred to and from the **Facility** through the **User's Plant** and **Apparatus** and "**Energised**" and "**Energising**" shall be construed accordingly.
Definition: **Extraordinary Governor Response**	Addition of reference to voltage and frequency rises to reflect upward and downward regulation provided by governor control systems.	Any response to a **Voltage Dip** or rise that requires an extraordinary response from normal behaviour of the **Governor Control System** of a **Generation Unit.** For the avoidance of doubt any action other than **Governor Control System** with respect to **Frequency** dips or rises is deemed to be an **Extraordinary Governor Response**. Where such schemes, including fast valving, are being considered by a **Generator** they	Any response to a **Voltage Dip** or rise that requires an extraordinary response from normal behaviour of the **Governor Control System** of a **Generation Unit.** For the avoidance of doubt any action other than **Governor Control System** with respect to **Frequency** dips or rises is deemed to be an **Extraordinary Governor Response**. Where such schemes, including fast valving, are being considered by a **Generator** they

		need to be formally agreed with the **TSO** before implementation, such agreement not to be unreasonably withheld.	need to be formally agreed with the **TSO** before implementation, such agreement not to be unreasonably withheld.
New Definition: **Fast Frequency Response (FFR)**	Addition of new definition as provision of both upward and downward direction response FFR will be contracted and utilised by the TSO under the system services market to support frequency control.	**Fast Frequency Response Downward (FFR Downward)** and **Fast Frequency Response Upward (FFR Upward)**.	**Fast Frequency Response Downward (FFR Downward) and Fast Frequency Response Upward (FFR Upward)**.
Definition: **Fast Frequency Response Downward (FFR Downward)**	Addition of new definition as provision of downward direction response FFR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's FFR Downward** reserve trigger, which is fully available in less than or equal to 1 second after the **Frequency** passes the **User's FFR Downward** reserve trigger, and is sustainable up to 10 seconds after the **Frequency** passes the **User's FFR Downward** reserve trigger.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's FFR Downward** reserve trigger, which is fully available in less than or equal to 1 second after the **Frequency** passes the **User's FFR Downward** reserve trigger, and is sustainable up to 10 seconds after the **Frequency** passes the **User's FFR Downward** reserve trigger.
Definition: **Fast Frequency Response Upward (FFR Upward)**	Addition of new definition as provision of upward direction response FFR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's FFR Upward** reserve trigger, which is fully available in less than or equal to 1 second after the **Frequency** passes the **User's FFR Upward** reserve trigger, and is sustainable up to 10 seconds after the **Frequency** passes the **User's FFR Upward** reserve trigger.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's FFR Upward** reserve trigger, which is fully available in less than or equal to 1 second after the **Frequency** passes the **User's FFR Upward** reserve trigger, and is sustainable up to 10 seconds after the **Frequency** passes the **User's FFR Upward** reserve trigger.
Definition: **Fault Disturbance**	Removal of reference to 'Generator ' so the definition is applicable to all relevant user types, as this defined term is used in the body of the Grid	Any type of fault including, but not limited to, single line to ground, line to line and three-phase short-circuits, in any single item of **Plant** anywhere in the **Transmission System** where the operation of the **TSO** protection will not disconnect the	Any type of fault including, but not limited to, single line to ground, line to line and three-phase short-circuits, in any single item of **Plant** anywhere in the **Transmission System** where the operation of the **TSO** protection will not disconnect the **Plant**

	Code in reference to users other than just Generators and in clauses relevant to grid frequency stability (e.g. CC.7.5.12.6).	~~**Generator**~~ **Plant** from the existing or planned **Transmission System** under normal or **Scheduled Outages** conditions. For the avoidance of doubt this **Fault Disturbance** can include bus zone protection.	from the existing or planned **Transmission System** under normal or **Scheduled Outages** conditions. For the avoidance of doubt this **Fault Disturbance** can include bus zone protection.
Definition: **Frequency Deadband**	'Frequency Deadband' definition is currently specific to Generation Unit governor control systems, but is also used in the body of the Grid Code with reference to Interconnector and Controllable PPM frequency response systems (e.g. OC.4.3.4.2.2, PPM1.5.3.13). Amended to include explicit reference to 'Frequency Response System', which is also proposed to be amended to include Interconnectors, and is already applicable to Controllable PPMs under the Grid Code.	A **Frequency** range within which ~~the~~ a **Governor Control System** or **Frequency Response System** is not expected to respond to changes in **Transmission System Frequency**. The purpose of the **Frequency Deadband** is to filter out noise and not to restrict the normal **Frequency** ~~response~~ **Response** of the **Governor Control System** or **Frequency Response System**.	A **Frequency** range within which a **Governor Control System** or **Frequency Response System** is not expected to respond to changes in **Transmission System Frequency**. The purpose of the **Frequency Deadband** is to filter out noise and not to restrict the normal **Frequency Response** of the **Governor Control System** or **Frequency Response System**.
Definition: **Frequency Response System**	Amended to also include Interconnectors as this defined term is used in the body of the Grid Code in reference to Interconnectors (e.g. OC.4.3.4.2).	A facility providing the means to automatically adjust the **Active Power** output from a **Generation Unit(s)** or **Interconnector** in response to changes in **Frequency**.	A facility providing the means to automatically adjust the **Active Power** output from a **Generation Unit(s)** or **Interconnector** in response to changes in **Frequency**.
Definition: **Governor Droop**	Updating definition to reflect upward and downward frequency control.	The percentage ~~drop~~ change in the **Frequency** that would cause the **Generation Unit** under free governor action to change its output from zero to its full **Capacity** as the **Frequency** decreases, and vice versa. In the case of a **Controllable PPM**, it is the percentage ~~drop~~ change in the **Frequency** that would cause the **Controllable PPM** to increase its output from zero to its full **Registered Capacity** as the **Frequency** decreases, and vice versa.	The percentage change in the **Frequency** that would cause the **Generation Unit** under free governor action to change its output from zero to its full **Capacity** as the **Frequency** decreases, and vice versa. In the case of a **Controllable PPM**, it is the percentage change in the **Frequency** that would cause the **Controllable PPM** to increase its output from zero to its full **Registered Capacity** as the **Frequency** decreases, and vice versa.

Definition: **Interconnector Frequency Droop**	Updating definition to reflect upward and downward frequency control.	In relation to an **Interconnector** transferring power into the **Transmission System**, it is the percentage ~~drop~~ change in the **Frequency** that would, under the action of the **Interconnector Frequency ~~Control~~ system Response System**, cause a change in the **Interconnector's** output from zero to its full **Interconnector Registered Import Capacity** in the case of drop in **System Frequency**, or cause a change in the **Interconnector's** output from its full **Interconnector Registered Import Capacity** to zero in the case of a rise in **System Frequency**. In relation to an **Interconnector** transferring power to an **External System,** it is the percentage ~~drop~~ change in the **Frequency** that would, under the action of the **Interconnector Frequency ~~Control~~ system Response System**, cause a change in the **Interconnector's** output from its full **Interconnector Registered Export Capacity** to zero in the case of a drop in **System Frequency**, or cause a change in the **Interconnector's** output from zero to its full **Interconnector Registered Export Capacity** in the case of a rise in **System Frequency.** In both cases, it is assumed that the **Frequency ~~Control~~ system Response System** is regulating the **Frequency** in the **Transmission System**.	In relation to an **Interconnector** transferring power into the **Transmission System**, it is the percentage change in the **Frequency** that would, under the action of the **Interconnector Frequency Response System**, cause a change in the **Interconnector's** output from zero to its full **Interconnector Registered Import Capacity** in the case of drop in **System Frequency**, or cause a change in the **Interconnector's** output from its full **Interconnector Registered Import Capacity** to zero in the case of a rise in **System Frequency**. In relation to an **Interconnector** transferring power to an **External System,** it is the percentage change in the **Frequency** that would, under the action of the **Interconnector Frequency Response System**, cause a change in the **Interconnector's** output from its full **Interconnector Registered Export Capacity** to zero in the case of a drop in **System Frequency**, or cause a change in the **Interconnector's** output from zero to its full **Interconnector Registered Export Capacity** in the case of a rise in **System Frequency.** In both cases, it is assumed that the **Frequency Response System** is regulating the **Frequency** in the **Transmission System**.
New Definition: **Limited Frequency Sensitive Mode – Over-Frequency (LFSM-O)**	This term is already used in the body of the Grid Code, but not as a defined term (e.g. OC.4.3.4.1.11). Addition of definition, as per the description in the EU Connection Network Codes RfG and HVDC, to provide greater clarity around frequency operating modes referenced in the Grid Code.	The operation of a **Generation Unit** or **Interconnector** whereby its **MW Output** or **Active Power** transfer to the **Transmission System** is reduced, or **Active Power** transfer from the **Transmission System** is increased, in response to an increase in **System Frequency** to or above the **LFSM-O Frequency** threshold.	The operation of a **Generation Unit** or **Interconnector** whereby its **MW Output** or **Active Power** transfer to the **Transmission System** is reduced, or **Active Power** transfer from the **Transmission System** is increased, in response to an increase in **System Frequency** to or above the **LFSM-O Frequency** threshold.

New Definition: **Limited Frequency Sensitive Mode – Under-Frequency (LFSM-U)**	This term is already used in the body of the Grid Code, but not as a defined term (e.g. OC.4.3.4.1.11). Addition of definition, as per the description in the EU Connection Network Codes RfG and HVDC, to provide greater clarity around frequency operating modes referenced in the Grid Code.	The operation of a **Generation Unit** or **Interconnector** whereby its **MW Output** or **Active Power** transfer to the **Transmission System** is increased, or **Active Power** transfer from the **Transmission System** is reduced, in response to a decrease in **System Frequency** to or below the **LFSM-U Frequency** threshold.	The operation of a **Generation Unit** or **Interconnector** whereby its **MW Output** or **Active Power** transfer to the **Transmission System** is increased, or **Active Power** transfer from the **Transmission System** is reduced, in response to a decrease in **System Frequency** to or below the **LFSM-U Frequency** threshold.
Definition: **Operating Characteristics**	Amended to include reference to Interconnectors as this defined term is used in the body of the Grid Code in reference to Interconnectors (e.g. PC.A6, OC.7.2.4.6.3).	The technical capabilities, flexibilities and limitations for the operation of a **Generation Unit**, **Interconnector** or **Demand Side Unit** as registered or declared in accordance with the provisions of the **Grid Code**.	The technical capabilities, flexibilities and limitations for the operation of a **Generation Unit**, **Interconnector** or **Demand Side Unit** as registered or declared in accordance with the provisions of the **Grid Code**.
Definition: **Operating Margin**	GC.1.2 of the Grid Code states that "….Where the **Glossary** refers to any word or term which is more particularly defined in a part of the **Grid Code**, the definition in that part of the **Grid Code** will prevail over the definition in the **Glossary** in the event of any inconsistency." Updating definition to align with existing clauses and proposed modified clauses under section OC.4.6 Operating Margin.	~~**Contingency Reserve** and **Operational Reserve.**~~ The **Operating Margin** is the amount of reserve provided by an increase or reduction in **Generation**, **Active Power** transfer and/or **Demand** available beyond that required to meet the expected **System Demand**. **Prudent Utility Practice** requires that a continuum of **Operating Margin** is provided to adequately limit, and then correct, the potential **Frequency** deviation which may occur due to a **Generation**/**Demand** imbalance. The **Operating Margin** consists of: • **Operating Reserve**; • **Replacement Reserve**; • **Substitute Reserve**; • **Contingency Reserve**.	The **Operating Margin** is the amount of reserve provided by an increase or reduction in **Generation**, **Active Power** transfer and/or **Demand** available beyond that required to meet the expected **System Demand**. **Prudent Utility Practice** requires that a continuum of **Operating Margin** is provided to adequately limit, and then correct, the potential **Frequency** deviation which may occur due to a **Generation**/**Demand** imbalance. The **Operating Margin** consists of: • **Operating Reserve**; • **Replacement Reserve**; • **Substitute Reserve**; • **Contingency Reserve**.
Definition: **Operating Reserve**	Updating definition as provision of both upward and downward direction response Operating Reserve will be contracted and utilised by the TSO under the system services market to support frequency control.	~~The additional **MW Output** required from **Generation Units** or **Interconnector** import or **Interconnector** export adjustment or **Demand** reduction which must be realisable in real time operation to contain and correct any potential **Power System Frequency** deviation to an acceptable level. It will include **Primary Operating~~	**Operating Reserve Downward** and **Operating Reserve Upward**.

		~~**Reserve, Secondary Operating Reserve** and **Tertiary Operating Reserve**~~ **Operating Reserve Downward** and **Operating Reserve Upward**.	
New Definition: **Operating Reserve Downward**	Addition of new definition as provision of downward direction response Operating Reserve will be contracted and utilised by the TSO under the system services market to support frequency control.	The additional reduction in **MW Output** required from **Generation Units**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System** by **Interconnectors**, and/or increase in **Demand** which must be realisable in real time operation to contain and correct any potential **Power System Frequency** deviation to an acceptable level. It includes **Fast Frequency Response Downward**, **Primary Operating Reserve Downward, Secondary Operating Reserve Downward** and **Tertiary Operating Reserve Downward**.	The additional reduction in **MW Output** required from **Generation Units**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System** by **Interconnectors**, and/or increase in **Demand** which must be realisable in real time operation to contain and correct any potential **Power System Frequency** deviation to an acceptable level. It includes **Fast Frequency Response Downward**, **Primary Operating Reserve Downward, Secondary Operating Reserve Downward** and **Tertiary Operating Reserve Downward**.
New Definition: **Operating Reserve Upward**	Addition of new definition as provision of upward direction response Operating Reserve will be contracted and utilised by the TSO under the system services market to support frequency control.	The additional increase in **MW Output** required from **Generation Units**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System** by **Interconnectors**, and/or **Demand** reduction which must be realisable in real time operation to contain and correct any potential **Power System Frequency** deviation to an acceptable level. It includes **Fast Frequency Response Upward**, **Primary Operating Reserve Upward**, **Secondary Operating Reserve Upward** and **Tertiary Operating Reserve Upward**.	The additional increase in **MW Output** required from **Generation Units**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System** by **Interconnectors**, and/or **Demand** reduction which must be realisable in real time operation to contain and correct any potential **Power System Frequency** deviation to an acceptable level. It includes **Fast Frequency Response Upward**, **Primary Operating Reserve Upward**, **Secondary Operating Reserve Upward** and **Tertiary Operating Reserve Upward**.
Definition: **Operational Data**	GC.1.2 of the Grid Code states that "….Where the **Glossary** refers to any word or term which is more particularly defined in a part of the **Grid Code**, the definition in that part of the **Grid Code** will prevail over the definition in the **Glossary** in the event of any inconsistency." Definition amended here to reflect all data supplied under the Grid Code, not just data supplied under the Operating Codes and/or Scheduling	All ~~D~~data required ~~under the **Operating Codes** and/or **Scheduling** and **Dispatch Codes**.~~ to be supplied by either the **TSO** or **Users** under the **Grid Code** or any other data expressly provided to be **Operational Data** under the **Grid Code**.	All data required to be supplied by either the **TSO** or **Users** under the **Grid Code** or any other data expressly provided to be **Operational Data** under the **Grid Code**.

	and Dispatch Codes, as per description in OC.7.2.8.1.		
Definition: **Plant**	Bolding and capitalising 'Generation' and 'Supply' as defined terms under the Grid Code. Amended here, as opposed to in a housekeeping modification batch, as the definition has relevance to other proposed changes under this modification proposal (e.g. definition for 'Energise').	Fixed and movable items used in the ~~generation~~ **Generation** and/or consumption of and/or ~~supply~~ **Supply** and/or transmission of electricity other than **Apparatus**.	Fixed and movable items used in the **Generation** and/or consumption of and/or **Supply** and/or transmission of electricity other than **Apparatus**.
Definition: **Primary Frequency Control**	Addition of "including, but not limited to … etc." to allow for reference to contributions to primary frequency control other than those already explicitly listed in this clause. Also, the defined terms 'Frequency' and 'Pumped Storage Units' have been bolded and capitalised.	**Primary Frequency Control** takes place in the period of up to 30 seconds after a change in **Frequency** and is achieved by automatic corrective responses to **Frequency** deviations occurring on the **Transmission System**. This automatic correction arises from: (a) natural frequency demand relief of motor load; (b) automatic MW output adjustment of **Generation Units** initiated by **Governor Droop** or other responses including, but not limited to, peaking of **Combustion Turbine Units**, condensate stop or ~~frequency~~ **Frequency** triggered response of ~~pumped storage units~~ **Pumped Storage Units**, etc.; (c) automatic load shedding (see OC.5 **Demand Control**).	**Primary Frequency Control** takes place in the period of up to 30 seconds after a change in **Frequency** and is achieved by automatic corrective responses to **Frequency** deviations occurring on the **Transmission System**. This automatic correction arises from: (a) natural frequency demand relief of motor load; (b) automatic MW output adjustment of **Generation Units** initiated by **Governor Droop** or other responses including, but not limited to, peaking of **Combustion Turbine Units**, condensate stop or **Frequency** triggered response of **Pumped Storage Units**, etc.; (c) automatic load shedding (see OC.5 **Demand Control**).
Definition: **Primary Operating Reserve (POR)**	Updating definition as provision of both upward and downward direction response POR will be contracted and utilised by the TSO under the system services market to support frequency control.	~~The additional **MW Output** (and/or reduction in **Demand**) required at the **Frequency** nadir (minimum), compared to the pre-incident output (or **Demand**), which is fully available and sustainable between 5 seconds and 15 seconds after an **Event** and where the nadir occurs between 5 and 15 seconds after the **Event**. If the actual **Frequency** nadir occurs less than 5 seconds or more than 15 seconds after the **Event**, then for the purpose of **POR** monitoring the nadir is deemed to be the lowest **Frequency** which occurred between 5 and 15 seconds after the event.~~	**Primary Operating Reserve Downward (POR Downward)** and **Primary Operating Reserve Upward (POR Upward)**.

		Primary Operating Reserve Downward (POR Downward) and **Primary Operating Reserve Upward (POR Upward)**.	
New Definition: **Primary Operating Reserve Downward (POR Downward)**	Addition of new definition as provision of downward direction response POR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's POR Downward** reserve trigger, which is fully available in less than or equal to 5 seconds after the **Frequency** passes the **User's POR Downward** reserve trigger, and is sustainable up to 15 seconds after the **Frequency** passes the **User's POR Downward** reserve trigger.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's POR Downward** reserve trigger, which is fully available in less than or equal to 5 seconds after the **Frequency** passes the **User's POR Downward** reserve trigger, and is sustainable up to 15 seconds after the **Frequency** passes the **User's POR Downward** reserve trigger.
New Definition: **Primary Operating Reserve Upward (POR Upward)**	Addition of new definition as provision of upward direction response POR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** before the **Frequency** passed the **User's POR Upward** reserve trigger, which is fully available in less than or equal to 5 seconds after the **Frequency** passes the **User's POR Upward** reserve trigger, and is sustainable up to 15 seconds after the **Frequency** passes the **User's POR Upward** reserve trigger.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** before the **Frequency** passed the **User's POR Upward** reserve trigger, which is fully available in less than or equal to 5 seconds after the **Frequency** passes the **User's POR Upward** reserve trigger, and is sustainable up to 15 seconds after the **Frequency** passes the **User's POR Upward** reserve trigger.
Definition: **Provisional Outage Programme**	Updating definition to reference DSUs, as relevant to section OC.2 Operational Planning. Also updating this definition to align with structure of definitions for 'Committed Outage Programme' and newly proposed 'Transmission Outage Programme'. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or are likely to, affect their capability to provide	A~~n~~ programme of **Outage**s ~~programme~~ of ~~the **Generator's**~~ **Generation Units**, ~~and of~~ **Interconnectors**, and which may include **Demand Side Units,** as prepared by the **TSO** pursuant to OC2 and covering years 2-3 ahead.	A programme of **Outages** of **Generation Units**, **Interconnectors,** and which may include **Demand Side Units,** as prepared by the **TSO** pursuant to OC2 and covering years 2-3 ahead.

	Ancillary/System Services (OC.2.2 and OC.2.7).		
Definition: **Ramp Down Rate**	This defined term is referenced in another defined term 'Maximum Ramp Down Rate'. 'Maximum Ramp Down Rate' currently applies to DSUs under the Grid Code, but 'Ramp Down Rate' does not. Definition amended here to reference DSUs. Inclusion of explicit reference to Generators with respect to 'Warmth' and 'MW Output' of plant. Bolding and capitalising 'Plant' as a defined term under the Grid Code. Amended here, as opposed to in a housekeeping modification batch, as the definitions have relevance to frequency control.	The maximum rate of decrease in a **Generating Unit's Output** after the **End Of Start-up Period**, or the maximum rate of decrease in a **Demand Side Unit's Demand Side Unit MW Response**. The **Ramp Down Rate** applies over the output range from its **Registered Capacity** to **Minimum Generation** or from its **Maximum Export Capacity** to **Maximum Import Capacity** in the case of an **Energy Storage Power Station**, or from its **Demand Side Unit MW Capacity** to zero in the case of a **Demand Side Unit**. For **Generators**, ~~T~~the rate of change is not dependent upon the initial **Warmth** of the ~~plant~~ **Plant** but may depend on the **MW Output**. There may be circumstances where more than one parameter applies and this is indicated by adding a number at the end of the parameter.	The maximum rate of decrease in a **Generating Unit's Output** after the **End Of Start-up Period**, or the maximum rate of decrease in a **Demand Side Unit's Demand Side Unit MW Response**. The **Ramp Down Rate** applies over the output range from its **Registered Capacity** to **Minimum Generation** or from its **Maximum Export Capacity** to **Maximum Import Capacity** in the case of an **Energy Storage Power Station**, or from its **Demand Side Unit MW Capacity** to zero in the case of a **Demand Side Unit**. For **Generators**, the rate of change is not dependent upon the initial **Warmth** of the **Plant** but may depend on the **MW Output**. There may be circumstances where more than one parameter applies and this is indicated by adding a number at the end of the parameter.
Definition: **Ramp Up Rate**	This defined term is referenced in another defined term 'Maximum Ramp Up Rate'. 'Maximum Ramp Up Rate' currently applies to DSUs under the Grid Code, but 'Ramp Up Rate' does not. Amended here to reference DSUs, along with bolding and capitalising of 'Plant' as a defined term under the Grid Code. Amended here, as opposed to in a housekeeping modification batch, as the definitions have relevance to frequency control.	The maximum rate of increase in a **Generating Unit's Output** after the **End Of Start-up Period** or the maximum rate of increase in a **Demand Side Unit's Demand Side Unit MW Response**. This rate of increase continues until the **Generating Unit** reaches the level of output instructed by the control room operator of its **Registered Capacity** or from its **Maximum Import Capacity** to **Maximum Export Capacity** in the case of an **Energy Storage Power Station**, or of its **Demand Side Unit MW Capacity** in the case of a **Demand Side Unit**. The rate of increase is not dependent upon the initial **Warmth** of the ~~plant~~ **Plant** but may depend on the **MW Output**. There may be circumstances where more than one parameter applies and this is indicated by adding a number at the end of the parameter.	The maximum rate of increase in a **Generating Unit's Output** after the **End Of Start-up Period** or the maximum rate of increase in a **Demand Side Unit's Demand Side Unit MW Response**. This rate of increase continues until the **Generating Unit** reaches the level of output instructed by the control room operator of its **Registered Capacity** or from its **Maximum Import Capacity** to **Maximum Export Capacity** in the case of an **Energy Storage Power Station**, or of its **Demand Side Unit MW Capacity** in the case of a **Demand Side Unit**. The rate of increase is not dependent upon the initial **Warmth** of the **Plant** but may depend on the **MW Output**. There may be circumstances where more than one parameter applies and this is indicated by adding a number at the end of the parameter.

Definition: **Registered Operating Characteristics**	Amended to include DSUs as users who are also required to register this information under the Connection Conditions of the Grid Code (e.g. CC.7.4). This defined term is also used in other sections of the Grid Code that equally apply to DSUs (e.g. OC.10.5 Testing). Removal of individual paragraphs for different user types, for conciseness.	The values of a **Generation Unit's**, **Interconnector's** or **Demand Side Unit's Operating Characteristics** for operation of the **Generation Unit**, **Interconnector** or **Demand Side Unit** pursuant to the **Grid Code** registered under the **Connection Conditions**. ~~The values of an **Interconnector's Operating Characteristics** for operation of the **Interconnector** pursuant to the **Grid Code** registered under the **Connection Conditions**.~~	The values of a **Generation Unit's**, **Interconnector's** or **Demand Side Unit's Operating Characteristics** for operation of the **Generation Unit**, **Interconnector** or **Demand Side Unit** pursuant to the **Grid Code** registered under the **Connection Conditions**.
Definition: **Replacement Reserve (RR)**	Updating definition as provision of both upward and downward direction response RR will be contracted and utilised by the TSO under the system services market to support frequency control.	~~**Replacement Reserve** is the additional **MW Output** (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 20 minutes to 4 hours following an **Event**.~~ **Replacement Reserve Downward (RR Downward)** and **Replacement Reserve Upward (RR Upward)**.	**Replacement Reserve Downward (RR Downward)** and **Replacement Reserve Upward (RR Upward)**.
New Definition: **Replacement Reserve Downward (RR Downward)**	Addition of new definition as provision of downward direction response RR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's RR Downward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **RR Downward**, which, taking into account other relevant criteria, is fully available by 20 minutes after either of the above cases, and is sustainable for at least 1 hour after either of the above cases.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's RR Downward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **RR Downward**, which, taking into account other relevant criteria, is fully available by 20 minutes after either of the above cases, and is sustainable for at least 1 hour after either of the above cases.
New Definition: **Replacement Reserve Upward (RR Upward)**	Addition of new definition as provision of upward direction response RR will be contracted and	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power**	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power**

	utilised by the TSO under the system services market to support frequency control.	transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's RR Upward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **RR Upward**, which, taking into account other relevant criteria, is fully available by 20 minutes after either of the above cases, and is sustainable for at least 1 hour after either of the above cases.	transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's RR Upward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **RR Upward**, which, taking into account other relevant criteria, is fully available by 20 minutes after either of the above cases, and is sustainable for at least 1 hour after either of the above cases.
Definition: **Reserve Characteristics**	Amended to also include Interconnectors and DSUs. This defined term is used in the body of the Grid Code in reference to these user types (e.g. SDC2.4.1.1).	The MW level of reserve available at any given ~~MW~~ **MW Output**, **Active Power** transfer or **Demand** of a **CDGU** or **Interconnector** or **Demand Side Unit** as set out in the available **Ancillary Service Agreement**.	The MW level of reserve available at any given **MW Output**, **Active Power** transfer or **Demand** of a **CDGU** or **Interconnector** or **Demand Side Unit** as set out in the available **Ancillary Service Agreement**.
Definition: **Secondary Frequency Control**	Addition of "but are not limited to" to allow for reference to contributions to secondary frequency control other than those already explicitly listed in this clause.	**Secondary Frequency Control** takes place in the time scale from 5 seconds up to 10 minutes after the change in **Frequency**. It is provided by a combination of automatic and manual actions. These include, but are not limited to: (a) a contribution from automatic governor action and other control systems on **Generation Units**; (b) manual action by **Generation Unit** operators altering the **MW Output** of **Generation Units** in response to **Dispatch Instructions** issued by the **TSO** in accordance with SDC2.	**Secondary Frequency Control** takes place in the time scale from 5 seconds up to 10 minutes after the change in **Frequency**. It is provided by a combination of automatic and manual actions. These include, but are not limited to: (a) a contribution from automatic governor action and other control systems on **Generation Units**; (b) manual action by **Generation Unit** operators altering the **MW Output** of **Generation Units** in response to **Dispatch Instructions** issued by the **TSO** in accordance with SDC2.
Definition: **Secondary Operating Reserve (SOR)**	Updating definition as provision of both upward and downward direction response SOR will be contracted and utilised by the TSO under the system services market to support frequency control.	~~The additional **MW Output** (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**), which is fully available by 15 seconds from the time of the start of the **Frequency** fall and sustainable up to 90 seconds following an **Event.**~~ **Secondary Operating Reserve Downward (SOR Downward)** and **Secondary Operating Reserve Upward (SOR Upward)**.	**Secondary Operating Reserve Downward (SOR Downward)** and **Secondary Operating Reserve Upward (SOR Upward)**.

New Definition: **Secondary Operating Reserve Downward (SOR Downward)**	Addition of new definition as provision of downward direction response SOR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's SOR Downward** reserve trigger, which is fully available by 15 seconds after the **Frequency** passes the **User's SOR Downward** reserve trigger, and is sustainable up to 90 seconds after the **Frequency** passes the **User's SOR Downward** reserve trigger.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's SOR Downward** reserve trigger, which is fully available by 15 seconds after the **Frequency** passes the **User's SOR Downward** reserve trigger, and is sustainable up to 90 seconds after the **Frequency** passes the **User's SOR Downward** reserve trigger.
New Definition: **Secondary Operating Reserve Upward (SOR Upward)**	Addition of new definition as provision of upward direction response SOR will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's SOR Upward** reserve trigger, which is fully available by 15 seconds after the **Frequency** passes the **User's SOR Upward** reserve trigger, and is sustainable up to 90 seconds after the **Frequency** passes the **User's SOR Upward** reserve trigger.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's SOR Upward** reserve trigger, which is fully available by 15 seconds after the **Frequency** passes the **User's SOR Upward** reserve trigger, and is sustainable up to 90 seconds after the **Frequency** passes the **User's SOR Upward** reserve trigger.
Definition: **Substitute Reserve**	The TSO is not actively utilising 'Substitute Reserve' at this point in time, but it is a possible metric for assessing Operating Margin/Capacity Adequacy and so may be used by the TSO. Likely to revisit this defined term when reviewing the Grid Code for FASS non-reserve products, due to overlap with ramping margin products. Updating definition to reflect upward and downward frequency control, in case of use by the TSO.	The required additional ~~MW output (and/or reduction in **Demand**)~~ increase or reduction in **MW Output** required from **Generation Units**, **Active Power** transfer from **Interconnectors**, and/or **Demand** ~~required~~ compared to the ~~pre-incident output (or **Demand**)~~ **MW Output**, **Active Power** transfer and/or **Demand** before the start of a **Frequency** deviation, which is fully available by 4 hours after the start of the **Frequency** deviation and sustainable ~~over the period from 4 hours~~ up to 24 hours ~~following an **Event.**~~ after the start of a **Frequency** deviation.	The required additional increase or reduction in **MW Output** required from **Generation Units**, **Active Power** transfer from **Interconnectors**, and/or **Demand** compared to the **MW Output**, **Active Power** transfer and/or **Demand** before the start of a **Frequency** deviation, which is fully available by 4 hours after the start of the **Frequency** deviation and sustainable up to 24 hours after the start of a **Frequency** deviation.

New Definition: **System Services Code**	New definition required for System Services Code, which is currently under development by SONI and EirGrid and which will be referenced in the body of the Grid Code where relevant.	The **System Services Code**, including its appendices and agreed procedures, which is administered and maintained by the **TSO** and the **Other TSO** and contains the arrangements relating to the governance, definition, procurement and settlement of **System Services**.	The **System Services Code**, including its appendices and agreed procedures, which is administered and maintained by the **TSO** and the **Other TSO** and contains the arrangements relating to the governance, definition, procurement and settlement of **System Services**.
Definition: **System Support Agreement**	Agreement is specific to SONI and so has been amended to refer to the 'Other TSO' and 'Other Transmission System' as defined under the Grid Code.	A bilateral agreement between the **Other TSO** and a **User** for services which are required for **Other Transmission System** reasons and which exclude those which must be provided by **Users** in accordance with the Connection Conditions in the **Other Grid Code**.	A bilateral agreement between the **Other TSO** and a **User** for services which are required for **Other Transmission System** reasons and which exclude those which must be provided by **Users** in accordance with the Connection Conditions in the **Other Grid Code**.
Definition: **Tertiary Operating Reserve**	Inclusion of acronym in the definition title for 'Tertiary Operating Reserve'.	**Tertiary Operating Reserve (TOR)**	**Tertiary Operating Reserve (TOR)**
Definition: **Tertiary Operating Reserve band 1 (TOR1)**	Updating definition as provision of both upward and downward direction response TOR1 will be contracted and utilised by the TSO under the system services market to support frequency control.	~~The additional **MW Output** (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 90 seconds to 5 minutes following an event.~~ **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)** and **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**.	**Tertiary Operating Reserve band 1 Downward (TOR1 Downward)** and **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**.
New Definition: **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)**	Addition of new definition as provision of downward direction response TOR1 will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's TOR1 Downward** reserve trigger, which is fully available by 90 seconds after the **Frequency** passes the **User's TOR1 Downward** reserve trigger, and is sustainable up to 5 minutes after the **Frequency** passes the **User's TOR1 Downward** reserve trigger.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's TOR1 Downward** reserve trigger, which is fully available by 90 seconds after the **Frequency** passes the **User's TOR1 Downward** reserve trigger, and is sustainable up to 5 minutes after the **Frequency** passes the **User's TOR1 Downward** reserve trigger.

Definition: **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**	Updating definition as provision upward direction response TOR1 will be contracted and utilised by the TSO under the system services market to support frequency control, and can be provided by other users than just Generators.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, ~~(~~or reduction in **Demand**~~)~~ ~~required~~ from a **User** compared to the ~~pre-incident output (or **Demand**)~~ **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's TOR1 Upward** reserve trigger, which is fully available by 90 seconds after the **Frequency** passes the **User's TOR1 Upward** reserve trigger, and is sustainable ~~over the period from 90 seconds~~ up to 5 minutes ~~following an event.~~ after the **Frequency** passes the **User's TOR1 Upward** reserve trigger.	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before the **Frequency** passed the **User's TOR1 Upward** reserve trigger, which is fully available by 90 seconds after the **Frequency** passes the **User's TOR1 Upward** reserve trigger, and is sustainable up to 5 minutes after the **Frequency** passes the **User's TOR1 Upward** reserve trigger.
Definition: **Tertiary Operating Reserve band 2 (TOR2)**	Updating definition as provision of both upward and downward direction response TOR2 will be contracted and utilised by the TSO under the system services market to support frequency control.	~~The additional **MW Output** (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 5 minutes to 20 minutes following an event.~~ **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)** and **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**.	**Tertiary Operating Reserve band 2 Downward (TOR2 Downward)** and **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**.
New Definition: **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**	Addition of new definition as provision of downward direction response TOR2 will be contracted and utilised by the TSO under the system services market to support frequency control.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's TOR2 Downward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **TOR2 Downward**, which, taking into account other relevant criteria, is fully available by 5 minutes after either of the above cases, and is sustainable up to 20 minutes after either of the above cases.	The required additional reduction in **MW Output**, increase in **Active Power** transfer to an **External System** or reduction in **Active Power** transfer to the **Transmission System**, or increase in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's TOR2 Downward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **TOR2 Downward**, which, taking into account other relevant criteria, is fully available by 5 minutes after either of the above cases, and is sustainable up to 20 minutes after either of the above cases.
Definition:	Updating definition as provision upward direction response TOR1 will	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active**	The required additional increase in **MW Output**, reduction in **Active Power** transfer to an **External System** or increase in **Active**

Tertiary Operating Reserve band 2 Upward (TOR2 Upward)	be contracted and utilised by the TSO under the system services market to support frequency control, and can be provided by other users than just Generators.	**Power** transfer to the **Transmission System**, ~~(and/~~or reduction in **Demand**~~)~~ ~~required~~ from a **User** compared to the ~~pre-incident output (or **Demand**)~~ **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's TOR2 Upward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **TOR2 Upward**, which, taking into account other relevant criteria, is fully available by 5 minutes after either of the above cases, and is sustainable ~~over the period from 5 minutes~~ up to 20 minutes ~~following an event.~~ after either of the above cases.	**Power** transfer to the **Transmission System**, or reduction in **Demand** from a **User** compared to the **MW Output**, **Active Power** transfer or **Demand** from the **User** before: - the **Frequency** passed the **User's TOR2 Upward** reserve trigger, or - the **User** is instructed by the **TSO** to provide **TOR2 Upward**, which, taking into account other relevant criteria, is fully available by 5 minutes after either of the above cases, and is sustainable up to 20 minutes after either of the above cases.
New Definition: **Tertiary Operating Reserve Downward (TOR Downward)**	Addition of new definition TOR Downward to include reference to TOR1 Downward and TOR2 Downward.	**Tertiary Operating Reserve band 1 Downward (TOR1 Downward)** and **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**.	**Tertiary Operating Reserve band 1 Downward (TOR1 Downward)** and **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**.
Definition: **Tertiary Operating Reserve Upward (TOR Upward)**	Addition of new definition TOR Upward to include reference to TOR1 Upward and TOR2 Upward.	**Tertiary Operating Reserve band 1 Upward (TOR1 Upward)** and **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**.	**Tertiary Operating Reserve band 1 Upward (TOR1 Upward)** and **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**.
New Definition: **Transmission Outage Programme**	Addition of new definition to be added for consistency and clarity. Included in this modification, as opposed to a separate modification, due to the potential impacts of outages on availability to provide system services.	A programme of **Outages** of **Transmission System Plant** prepared by the **TSO** for maintenance and capital works purposes covering a calendar year.	A programme of **Outages** of **Transmission System Plant** prepared by the **TSO** for maintenance and capital works purposes covering a calendar year.

PC.A4.3	Replacing undefined terms with relevant defined terms for upward provision of reserve.	[…] § **Reserve Capability** ~~Primary Spinning Reserve~~ **Primary Operating Reserve** ~~Secondary Spinning Reserve~~ **Secondary Operating Reserve** ~~**Tertiary Reserve**~~ **Tertiary Operating Reserve** Give details of reserve capability of the **Generator** in different operating modes: Unit co-ordinating, turbine follow, recirculation, base load, etc. What reserve, if any, is available when the unit is off load? […]	[…] § **Reserve Capability** **Primary Operating Reserve** **Secondary Operating Reserve** **Tertiary Operating Reserve** Give details of reserve capability of the **Generator** in different operating modes: Unit co-ordinating, turbine follow, recirculation, base load, etc. What reserve, if any, is available when the unit is off load? […]
CC.7.3.1.1 (u)	Modified to clarify that existing Operating Reserve requirements for Generators under CC.7.3.1.1 (u) are only applicable to upward direction response provision of Operating Reserve, excluding FFR Upward.	[…] (u) **Operating Reserve Upward** (excluding **FFR Upward**) (i) **POR Upward** not less than 5% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 95% **Registered Capacity**, with provision in the range of 95% to 100**% Registered Capacity** to be not less than that indicated by a straight line with unity decay from 5% of **Registered Capacity** at 95% output to 0 at 100% output. (ii) **SOR Upward** not less than 5% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 95% **Registered Capacity**, with provision in the range of 95% to 100% **Registered Capacity** to be not less than that indicated by a straight line with unity decay from 5% of **Registered Capacity** at 95% output to 0 at 100% output. (iii) **TOR1 Upward** not less than 8% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 92% **Registered Capacity**, with provision in the range of 92% to 100%	[…] (u) **Operating Reserve Upward** (excluding **FFR Upward**) (i) **POR Upward** not less than 5% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 95% **Registered Capacity**, with provision in the range of 95% to 100**% Registered Capacity** to be not less than that indicated by a straight line with unity decay from 5% of **Registered Capacity** at 95% output to 0 at 100% output. (ii) **SOR Upward** not less than 5% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 95% **Registered Capacity**, with provision in the range of 95% to 100% **Registered Capacity** to be not less than that indicated by a straight line with unity decay from 5% of **Registered Capacity** at 95% output to 0 at 100% output. (iii) **TOR1 Upward** not less than 8% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 92% **Registered Capacity**, with provision in the range of 92% to 100%

		Registered Capacity to be not less than that indicated by a straight line with unity decay from 8% of Registered Capacity at 92% output to 0 at 100% output (iv) **TOR2 Upward** not less than 10% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 90% **Registered Capacity**, with provision in the range of 90% to 100% **Registered Capacity** to be not less than that indicated by a straight line with unity decay from 10% of Registered Capacity at 90% output to 0 at 100% output.	**Registered Capacity** to be not less than that indicated by a straight line with unity decay from 8% of Registered Capacity at 92% output to 0 at 100% output (iv) **TOR2 Upward** not less than 10% **Registered Capacity** To be provided, at a minimum, at **MW Outputs** in the range from 50% to 90% **Registered Capacity**, with provision in the range of 90% to 100% **Registered Capacity** to be not less than that indicated by a straight line with unity decay from 10% of Registered Capacity at 90% output to 0 at 100% output.
CC.7.5.1.1	Bolding 'Interconnector' and 'System Services' as defined terms under the Grid Code. Including reference to Active Power transfers for Interconnectors, rather than the defined term 'MW Output', which, under the Grid Code, is specific to Generation Units.	Each ~~Interconnector,~~ **Interconnector** shall have the following minimum capabilities~~.~~. ~~f~~For the avoidance of doubt, additional performance capabilities are required ~~from~~ under OC.4 ~~System Services~~ **System Services**: ⧺ (a) operate continuously at ~~**MW Output**~~ **Active Power** transfer from an **External System** or from the **Transmission System** at **Transmission System Frequencies** in the range 49.5Hz to 50.5Hz; […] (e) remain connected to the **Transmission System** at ~~**MW Output**~~ **Active Power** transfer from an **External System** or from the **Transmission System** at **Transmission System Voltages** within the ranges specified in CC.8.3.2 for step changes in **Transmission System Voltage** of up to 10%;	Each **Interconnector** shall have the following minimum capabilities. For the avoidance of doubt, additional performance capabilities are required under OC.4**System Services**: ⧺ (a) operate continuously at **Active Power** transfer from an **External System** or from the **Transmission System** at **Transmission System Frequencies** in the range 49.5Hz to 50.5Hz; […] (e) remain connected to the **Transmission System** at **Active Power** transfer from an **External System** or from the **Transmission System** at **Transmission System Voltages** within the ranges specified in CC.8.3.2 for step changes in **Transmission System Voltage** of up to 10%;

		[…]	[…]
OC.2.2	Amended to reference other user types/technologies for which there is an obligation to inform the TSO of proposed maintenance and outages of their plant which will, or are likely to, affect their capability to provide Ancillary/System Services (also see OC.2.7).	[…] OC.2 shall apply to all proposed **Outages** that may affect the ability of a **Generation Unit, Interconnector, Aggregated Generating Unit** and **Demand Side Unit** to achieve, in accordance with its **Registered Operating Characteristics**, either its full **Registered Capacity**, appropriate to each **Registered Fuel**, **Interconnector Registered Capacity** or its **Demand Side Unit MW Capacity** as the case maybe. OC.2.7 also requires **Generators, Interconnector Operators, Generator Aggregators** and **Demand Side Unit Operators** to inform the **TSO** of other proposed maintenance of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit, Demand Side Unit** or any associated **Plant** or **Apparatus**, where such maintenance will affect the availability of **Ancillary Services** in respect of that **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.	[…] OC.2 shall apply to all proposed **Outages** that may affect the ability of a **Generation Unit, Interconnector, Aggregated Generating Unit** and **Demand Side Unit** to achieve, in accordance with its **Registered Operating Characteristics**, either its full **Registered Capacity**, appropriate to each **Registered Fuel**, **Interconnector Registered Capacity** or its **Demand Side Unit MW Capacity** as the case maybe. OC.2.7 also requires **Generators, Interconnector Operators, Generator Aggregators** and **Demand Side Unit Operators** to inform the **TSO** of other proposed maintenance of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit, Demand Side Unit** or any associated **Plant** or **Apparatus**, where such maintenance will affect the availability of **Ancillary Services** in respect of that **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.
OC.2.4.2	Amended to reference all relevant users' outage programmes, not just those for Generators. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or is likely to, affect their capability to provide Ancillary/System Services (OC.2.2 and OC.2.7).	In rolling over the **Generation Outage Programme** from one year to the next, for every year except the first year of the planning process: (a) submissions by the **Generator**, **Interconnector Operator**, **Generator Aggregator** and/or **Demand Side Unit Operator** for year 2 should reflect the current **Provisional Outage Programme** for year 3; and (b) submissions by the **Generator**, **Interconnector Operator**, **Generator Aggregator** and/or **Demand Side Unit Operator** for year 1 should reflect the current **Provisional Outage Programme** for year 2. except, in any such case, to the extent that the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** is reasonably responding to changed	In rolling over the **Generation Outage Programme** from one year to the next, for every year except the first year of the planning process: (c) submissions by the **Generator**, **Interconnector Operator**, **Generator Aggregator** and/or **Demand Side Unit Operator** for year 2 should reflect the current **Provisional Outage Programme** for year 3; and (d) submissions by the **Generator**, **Interconnector Operator**, **Generator Aggregator** and/or **Demand Side Unit Operator** for year 1 should reflect the current **Provisional Outage Programme** for year 2. except, in any such case, to the extent that the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** is reasonably responding to changed

		circumstances. This does not require **Generators**, **Interconnector Operators**, **Generator Aggregators** or **Demand Side Unit Operators** to explain changes unless required to do so by the **TSO**. The aggregate of all ~~**Generators'**~~ relevant **Users' Outage Programmes** is the **Generation Outage Programme** that will comprise the **COP** and **POP**.	circumstances. This does not require **Generators**, **Interconnector Operators**, **Generator Aggregators** or **Demand Side Unit Operators** to explain changes unless required to do so by the **TSO**. The aggregate of all relevant **Users' Outage Programmes** is the **Generation Outage Programme** that will comprise the **COP** and **POP**.
OC.2.4.3	Amended to include other relevant users who are required to submit details of their outages to the TSO. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or is likely to, affect their capability to provide Ancillary/System Services (OC.2.2 and OC.2.7).	By the end of March in year 0, **Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** shall submit to the **TSO**, for each **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**, details of **Outages** for inclusion in: (a) the **Committed Outage Programme (COP)** for year 1. Other than in the first year after the planning process has commenced, this will be based on the previous year's **Provisional Outage Programme** for year 2, which period through the passage of time has now become year 1, and any changes may only reflect the **Generator's**, **Interconnector Operator's**, **Generator Aggregator's**, and **Demand Side Unit Operator's** reasonable response to changed circumstances; (b) the **Provisional Outage Programme (POP)** for years 2 and 3. In the case of **Aggregated Generating Units**, and **Demand Side Units** which consist of **Aggregated Demand Sites**, the **Generator Aggregator** or **Demand Side Unit Operator** shall provide the aggregated **Outages**, and upon request from the **TSO** the **Generator Aggregator** or **Demand Side Unit Operator** shall provide the **Outage** for each individual site, in a reasonable time period. **Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** shall specify with regard to each of their **Generation Units**, **Interconnector**, **Aggregated**	By the end of March in year 0, **Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** shall submit to the **TSO**, for each **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**, details of **Outages** for inclusion in: (c) the **Committed Outage Programme (COP)** for year 1. Other than in the first year after the planning process has commenced, this will be based on the previous year's **Provisional Outage Programme** for year 2, which period through the passage of time has now become year 1, and any changes may only reflect the **Generator's**, **Interconnector Operator's**, **Generator Aggregator's**, and **Demand Side Unit Operator's** reasonable response to changed circumstances; (d) the **Provisional Outage Programme (POP)** for years 2 and 3. In the case of **Aggregated Generating Units**, and **Demand Side Units** which consist of **Aggregated Demand Sites**, the **Generator Aggregator** or **Demand Side Unit Operator** shall provide the aggregated **Outages**, and upon request from the **TSO** the **Generator Aggregator** or **Demand Side Unit Operator** shall provide the **Outage** for each individual site, in a reasonable time period. **Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** shall specify with regard to each of their **Generation Units**, **Interconnector**, **Aggregated**

		Generating Units or **Demand Side Units**, the start date and time and the duration of each **Outage**.	**Generating Units** or **Demand Side Units**, the start date and time and the duration of each **Outage**.
OC.2.4.6	Amended to include Interconnector Operator consistently within this clause. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or is likely to, affect their capability to provide Ancillary/System Services (OC.2.2 and OC.2.7). Also, the defined term 'Capacity Adequacy' has been bolded and capitalised.	**Generators**, **Interconnector Operators**, **Generator Aggregators**~~,~~ and **Demand Side Unit Operators** are required to signal adequately in advance major **Outages** which could impact on ~~capacity adequacy~~ **Capacity Adequacy** or on the **TSO's** transmission outage maintenance and development. In rolling over the **Generation Outage Programme** from one year to the next each **Generator**, **Interconnector Operator**, **Generator Aggregator** and **Demand Side Unit Operator** shall not be constrained in making any submission by any previous **Provisional Outage Programme**.	**Generators**, **Interconnector Operators**, **Generator Aggregators**~~,~~ and **Demand Side Unit Operators** are required to signal adequately in advance major **Outages** which could impact on **Capacity Adequacy** or on the **TSO's** transmission outage maintenance and development. In rolling over the **Generation Outage Programme** from one year to the next each **Generator**, **Interconnector Operator**, **Generator Aggregator** and **Demand Side Unit Operator** shall not be constrained in making any submission by any previous **Provisional Outage Programme**.
OC.2.6.3.4	Amended to include Interconnector Operator consistently within this clause. Relevant to this modification proposal as users are required to inform the TSO of proposed maintenance and outages of their plant which will, or is likely to, affect their capability to provide Ancillary/System Services (OC.2.2 and OC.2.7). Additionally, some corrections for grammar.	Where the **Outage** change is likely to have a detrimental effect on **Capacity Adequacy** or requirements for the secure operation of the **Transmission System** then the **TSO** shall not amend the **COP**. The **TSO** shall contact the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** and inform the **Generator**, **Interconnector Operator**~~'s~~, **Generator Aggregator** or **Demand Side Unit Operator** that the change to the **COP** has not been accepted~~, the~~. The **TSO** shall, at the **Generator's**, **Interconnector Operator's**, **Generator Aggregator's** or **Demand Side Unit Operator's** request, enter into discussions with the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** to facilitate an alternative **Modification** which may meet the requirements of the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** while not having an unacceptable effect on **Capacity Adequacy** or requirements for secure operation of the **Transmission System**.	Where the **Outage** change is likely to have a detrimental effect on **Capacity Adequacy** or requirements for the secure operation of the **Transmission System** then the **TSO** shall not amend the **COP**. The **TSO** shall contact the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** and inform the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** that the change to the **COP** has not been accepted. The **TSO** shall, at the **Generator's**, **Interconnector Operator's**, **Generator Aggregator's** or **Demand Side Unit Operator's** request, enter into discussions with the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** to facilitate an alternative **Modification** which may meet the requirements of the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** while not having an unacceptable effect on **Capacity Adequacy** or requirements for secure operation of the **Transmission System**. In the event that the **Generator**, **Interconnector Operator**,

		In the event that the **Generator**, **Interconnector Operator**, OC.2.6.3.1. **Error! Reference source not found.**	**Generator Aggregator** or **Demand Side Unit Operator** wishes to avail of an alternative **Modification**, it shall submit a change request in accordance with OC.2.6.3.1. **Error! Reference source not found.**
OC.2.7.1	Amended to include reference to other users who are obliged to inform the TSO of proposed maintenance of their plant, in addition to outages, where such maintenance will or is likely to affect their availability to provide system services. The following clause in the Grid Code, OC.2.7.2, which is a continuation of this clause, references both Generator Aggregators and DSUs.	**Generators**, ~~and~~ **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** will inform the **TSO** of any proposed maintenance, in addition to **Outages**, which will, or is likely to, affect the capability of the **Generation Unit**, ~~or~~ **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** to provide **Ancillary Services**, as soon as is reasonably possible.	**Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** will inform the **TSO** of any proposed maintenance, in addition to **Outages**, which will, or is likely to, affect the capability of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** to provide **Ancillary Services**, as soon as is reasonably possible.
OC.2.7.4	Amended to include reference to other users who are also obliged to notify the TSO in the event of the decision to cancel a major outage. Relevant to this modification proposal as, for example, the TSO may need to make necessary assessments and propose mitigation measures in relation to security of supply in light of this outage cancellation, which could potentially lead to a change in the availability of system services.	**Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** must immediately notify the **TSO** on making the decision to cancel a major **Outage** of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.	**Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** must immediately notify the **TSO** on making the decision to cancel a major **Outage** of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.

OC.2.7.4.1	Amended to include reference to other users who are obliged to notify the TSO in the event of the decision to cancel a major outage. Relevant to this modification proposal as, for example, the TSO may need to make necessary assessments and propose mitigation measures in relation to security of supply in light of this outage cancellation, which could potentially lead to a change in the availability of system services.	Following the decision by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** to cancel a major **Outage** of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**, ~~the Generator~~ relevant **User** must report to the **TSO**, on an on-going basis, practical, useful, and proportionate information to allow the **TSO** to make the necessary assessments and propose mitigation measures in relation to security of supply**.**	Following the decision by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** to cancel a major **Outage** of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**, relevant **User** must report to the **TSO**, on an on-going basis, practical, useful, and proportionate information to allow the **TSO** to make the necessary assessments and propose mitigation measures in relation to security of supply**.**
OC.2.7.4.1.1	Amended to include reference to other users who are obliged to notify the TSO in the event of the decision to cancel a major outage. Relevant to this modification proposal as, for example, the TSO may need to make necessary assessments and propose mitigation measures in relation to security of supply in light of this outage cancellation, which could potentially lead to a change in the availability of system services.	The reports should cover the following: (a) an explanation for the cancellation of a major **Outage**; (b) annual notification of major changes to the operational intentions of the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** and/or characteristics of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** as a result of the OC2.7.4.1.1 decision not to proceed with the major **Outage**; (c) assessments covering the risks of sudden and catastrophic failure.	The reports should cover the following: (a) an explanation for the cancellation of a major **Outage**; (b) annual notification of major changes to the operational intentions of the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** and/or characteristics of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** as a result of the OC2.7.4.1.1 decision not to proceed with the major **Outage**; (c) assessments covering the risks of sudden and catastrophic failure.
OC.2.7.5	Amended to include reference to other users who are obliged to notify the TSO in the event of sudden and catastrophic failure of their plant (also see GC.10 Plant Failures).	A **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** must immediately notify the **TSO** in the event of sudden and catastrophic failure of a **Generation Unit Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.	A **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** must immediately notify the **TSO** in the event of sudden and catastrophic failure of a **Generation Unit Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.

OC.2.7.5.1	Amended to include reference to other users who are obliged to notify the TSO in the event of sudden and catastrophic failure of their plant (also see GC.10 Plant Failures).	The **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** must report to the **TSO** the impact of the failure of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** and the future operation of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.	The **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** must report to the **TSO** the impact of the failure of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** and the future operation of the **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit**.
OC.2.7.5.2	Amended to include reference to other users/technologies for which the TSO is obliged to notify the Regulatory Authority in the event of its sudden and catastrophic failure, where a TSO assessment highlights the emergence of potential risks to the security of supply and the operation of the system.	The **TSO** must notify the **Regulatory Authority** if the assessments covering the sudden and catastrophic failure of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** highlight the emergence of potential risks to the security of supply and the operation of the **System.**	The **TSO** must notify the **Regulatory Authority** if the assessments covering the sudden and catastrophic failure of a **Generation Unit**, **Interconnector**, **Aggregated Generating Unit** or **Demand Side Unit** highlight the emergence of potential risks to the security of supply and the operation of the **System.**
OC.4.2.1	Amended to include reference to other users to whom section OC.4 System Services applies.	OC.4 applies to the **TSO** and to the following **Users**: (a) **Grid Connected Generators** with **Registered Capacity** greater than 2MW; (b) **Demand Customers**; (c) The **Distribution System Operator (DSO)**; ~~and~~ (d) **Interconnector Operators**~~.~~; (e) **Demand Side Unit Operators**; and (f) **Generator Aggregators**.	OC.4 applies to the **TSO** and to the following **Users**: (a) **Grid Connected Generators** with **Registered Capacity** greater than 2MW; (b) **Demand Customers**; (c) The **Distribution System Operator (DSO)**; (d) **Interconnector Operators**; (e) **Demand Side Unit Operators**; and (f) **Generator Aggregators**
OC.4.3.1.1	Addition of 'or controls' in order to reference units controllable by the TSO, as such users may, under the control of the TSO, provide reserve system services.	In order to maintain the security and integrity of the **Transmission System** it is necessary that the **TSO** operates the **Transmission System** and **Dispatches** or controls in such a manner as to provide adequate **Frequency Control** so as to achieve operation within applicable **Frequency** limits at all times.	In order to maintain the security and integrity of the **Transmission System** it is necessary that the **TSO** operates the **Transmission System** and **Dispatches** or controls in such a manner as to provide adequate **Frequency Control** so as to achieve operation within applicable **Frequency** limits at all times.
OC.4.3.3.2.1	Addition of 'can, for example,' and 'including, but not limited to … etc.' to allow for reference to contributions to primary frequency	**Primary Frequency Control** takes place in the period of up to 30 seconds after a change in **Frequency** and is achieved by automatic corrective responses to **Frequency** deviations	**Primary Frequency Control** takes place in the period of up to 30 seconds after a change in **Frequency** and is achieved by automatic corrective responses to **Frequency** deviations

	control other than those already explicitly listed in this clause, e.g. automatic Interconnector frequency response (e.g. OC.4.3.4.2). Also, the defined terms 'Frequency' and 'Pumped Storage Units' have been bolded and capitalised.	occurring on the **Transmission System**. This automatic correction can, for example, arise~~s~~ from: (a) natural frequency demand relief of motor load; (b) automatic MW output adjustment of **Generation Units** initiated by **Governor Droop** or other responses including, but not limited to, peaking of **Combustion Turbine Units**, condensate stop or ~~frequency~~ **Frequency** triggered response of ~~pumped storage units~~ **Pumped Storage Units**, etc.; (c) automatic load shedding (see OC.5 **Demand Control**).	occurring on the **Transmission System**. This automatic correction can, for example, arise from: (a) natural frequency demand relief of motor load; (b) automatic MW output adjustment of **Generation Units** initiated by **Governor Droop** or other responses including, but not limited to, peaking of **Combustion Turbine Units**, condensate stop or **Frequency** triggered response of **Pumped Storage Units**, etc.; (c) automatic load shedding (see OC.5 **Demand Control**).
OC.4.3.3.2.2	The defined term 'Frequency Regulation' is specific to Generators under the Grid Code and is only used in the body of the Grid Code when referencing synchronous Generators. Addition of 'Frequency Response' to include reference to PFC contributions from Interconnectors and Controllable PPMs.	Automatic **Primary Frequency Control** actions in response to normal **Frequency** fluctuations, within the levels specified in CC.8.2.1(a), on the **Transmission System** can be termed as "**Frequency Regulation**" or "**Frequency Response**". Inadequate **Frequency Regulation** can result in: (a) unscheduled operation because **Generation Units** are moving away from their **Dispatched** MW levels due to **Frequency** drift; (b) poor **External Interconnection** tie-line control; and (c) failure to meet the applicable **Frequency** limits.	Automatic **Primary Frequency Control** actions in response to normal **Frequency** fluctuations, within the levels specified in CC.8.2.1(a), on the **Transmission System** can be termed as "**Frequency Regulation**" or "**Frequency Response**". Inadequate **Frequency Regulation** can result in: (a) unscheduled operation because **Generation Units** are moving away from their **Dispatched** MW levels due to **Frequency** drift; (b) poor **External Interconnection** tie-line control; and (c) failure to meet the applicable **Frequency** limits.
OC.4.3.3.2.3	Removal of reference to the limits specified in CC.8.2.1(a) as Operating Reserve can be used to correct frequency deviations within the levels specified in CC.8.2.1(a), i.e. within the range 49.8 to 50.2 Hz. Listing of reserve system services that the TSO will contract and utilise to ensure adequate frequency control.	**Frequency** deviations, ~~outside the levels specified in CC.8.2.1(a)~~such as those that may occur ~~on~~ due to the loss of **Generation Unit(s)**, **Interconnectors** or other MW input into~~,~~ the **Transmission System** or the **Distribution System**, are corrected through the use of **Operating Reserve**, which is replenished through the use of **Replacement Reserve**. The **TSO** will contract and utilise reserve **System Services** via the **System Services** market (governed by the **System Services Code**) to enable **Frequency Control** procedures. These services will include: • **Fast Frequency Response Downward (FFR Downward)**;	**Frequency** deviations such as those that may occur due to the loss of **Generation Unit(s)**, **Interconnectors** or other MW input into, the **Transmission System** or the **Distribution System** are corrected through the use of **Operating Reserve**, which is replenished through the use of **Replacement Reserve**. The **TSO** will contract and utilise reserve **System Services** via the **System Services** market (governed by the **System Services Code**) to enable **Frequency Control** procedures. These services will include: • **Fast Frequency Response Downward (FFR Downward)**;

		• **Fast Frequency Response Upward (FFR Upward)**; • **Primary Operating Reserve Downward (POR Downward)**; • **Primary Operating Reserve Upward (POR Upward)**; • **Secondary Operating Reserve Downward (SOR Downward)**; • **Secondary Operating Reserve Upward (SOR Upward)**; • **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**; • **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)**; • **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**; • **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**; • **Replacement Reserve Upward (RR Upward)**; and • **Replacement Reserve Downward (RR Downward).**	• **Fast Frequency Response Upward (FFR Upward)**; • **Primary Operating Reserve Downward (POR Downward)**; • **Primary Operating Reserve Upward (POR Upward)**; • **Secondary Operating Reserve Downward (SOR Downward)**; • **Secondary Operating Reserve Upward (SOR Upward)**; • **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**; • **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)**; • **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**; • **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**; • **Replacement Reserve Upward (RR Upward)**; and • **Replacement Reserve Downward (RR Downward).**
OC.4.3.3.3.2	Addition of reference to AGC as the secondary frequency regulation system on the Transmission System, for clarity.	Improved **Secondary Frequency Control** can be achieved by use of a ~~**Secondary**~~ secondary **Frequency** ~~**Regulation System**~~ regulation system, known as "**Automatic Generator Control**" (**AGC**), which acts directly on the **MW Outputs** of participating **Generation Units** and on the **Active Power** transfer to or from **External Systems** by **Interconnectors**. This automatic action facilitates more frequent MW output adjustments than is practicable by means of **Dispatch Instructions** and manual setpoint adjustment, thus allowing more frequent and rapid **Frequency** correction.	Improved **Secondary Frequency Control** can be achieved by use of a secondary **Frequency** regulation system, known as "**Automatic Generator Control**" (**AGC**), which acts directly on the **MW Outputs** of participating **Generation Units** and on the **Active Power** transfer to or from **External Systems** by **Interconnectors**. This automatic action facilitates more frequent MW output adjustments than is practicable by means of **Dispatch Instructions** and manual setpoint adjustment, thus allowing more frequent and rapid **Frequency** correction.
OC.4.3.4.1.10	Bolding 'Generators' and 'Frequency Sensitive Mode' as defined terms under the Grid Code, as this clause is relevant to frequency control.	○ **Frequency Sensitive Mode** The following shall apply for ~~Generators~~ **Generators** operating in ~~Frequency Sensitive Mode~~ **Frequency Sensitive Mode** operation: […]	○ **Frequency Sensitive Mode** The following shall apply for **Generators** operating in **Frequency Sensitive Mode** operation: […]

OC.4.3.4.1.11	Bolding and capitalising 'Limited Frequency Sensitive Mode – Under-Frequency' and 'Limited Frequency Sensitive Mode – Over-Frequency' as newly proposed defined terms in this modification proposal, and as per the descriptions in the EU Connection Network Codes RfG and HVDC. Also bolding 'Frequency Sensitive Mode', which is an existing defined term under the Grid Code.	The **Frequency Response System** shall be required to change between ~~Limited Frequency Sensitive Mode – Under-frequency ,~~ **Limited Frequency Sensitive Mode – Under-Frequency**, ~~Limited Frequency Sensitive Mode – Over-frequency,~~ **Limited Frequency Sensitive Mode – Over-Frequency**, and ~~Frequency Sensitive Mode~~ **Frequency Sensitive Mode** within one minute from receipt of the appropriate signal from the **TSO**. **Generators** may be instructed to be in both ~~Limited Frequency Sensitive Mode – Under-frequency~~ **Limited Frequency Sensitive Mode – Under-Frequency** and ~~Limited Frequency Sensitive Mode – Over-frequency~~ **Limited Frequency Sensitive Mode – Over-Frequency** at the same time. **Generators** shall only operate in ~~Frequency Sensitive Mode~~ **Frequency Sensitive Mode** when they are not operating in ~~Limited Frequency Sensitive Mode – Under-frequency~~ **Limited Frequency Sensitive Mode – Under-Frequency** or ~~Limited Frequency Sensitive Mode – Over-frequency~~ **Limited Frequency Sensitive Mode – Over-Frequency**.	The **Frequency Response System** shall be required to change between **Limited Frequency Sensitive Mode – Under-Frequency**, **Limited Frequency Sensitive Mode – Over-Frequency**, and **Frequency Sensitive Mode** within one minute from receipt of the appropriate signal from the **TSO**. **Generators** may be instructed to be in both **Limited Frequency Sensitive Mode – Under-Frequency** and **Limited Frequency Sensitive Mode – Over-Frequency** at the same time. **Generators** shall only operate in **Frequency Sensitive Mode** when they are not operating in **Limited Frequency Sensitive Mode – Under-Frequency** or **Limited Frequency Sensitive Mode – Over-Frequency**.
OC.4.3.4.2.2	Some frequency response requirements were mistakenly demarcated as Non-HVDC Unit only, but should be applicable to all Interconnectors. Amended so the requirements apply to both HVDC Units and Non-HVDC Units as defined under the Grid Code. Bolding the existing defined terms 'Frequency Response System', 'Frequency Response' and 'Interconnector'. Bolding and capitalising 'Limited Frequency Sensitive Mode – Under-Frequency' and 'Limited Frequency Sensitive Mode – Over-Frequency' as newly proposed defined terms in this	Other than as permitted in accordance with OC.4.3.4.2.3 (a) **Interconnectors** when **Energised** shall operate at all times under the control of a **Frequency Response System**, unless otherwise specified by the **TSO**, with characteristics within the appropriate ranges as specified in the **Connection Conditions**; (b) No intentional time delays other than those agreed with the **TSO** shall be introduced into the **Frequency Response System**; (c) **Interconnectors** shall not act to control the frequency in an **External System** unless agreed in advance with the **TSO** and the **External System Operator.**	Other than as permitted in accordance with OC.4.3.4.2.3: (a) **Interconnectors** when **Energised** shall operate at all times under the control of a **Frequency Response System**, unless otherwise specified by the **TSO**, with characteristics within the appropriate ranges as specified in the **Connection Conditions**; (b) No intentional time delays other than those agreed with the **TSO** shall be introduced into the **Frequency Response System**; (c) **Interconnectors** shall not act to control the frequency in an **External System** unless agreed in advance with the **TSO** and the **External System Operator.**

	modification proposal, and as per the descriptions in the EU Connection Network Codes RfG and HVDC. Also, correcting the misspelling of 'capable' and using the plural 'Interconnectors' where appropriate to correct for grammar.	⫴ Additionally, ~~O~~other than as permitted in accordance with OC.4.3.4.2.3: ~~(a) **Interconnectors** when **Energised** shall operate at all times in **Frequency Control** mode, unless otherwise specified by the **TSO**, with characteristics within the appropriate ranges as specified in **Connection Conditions**;~~ ~~(b)~~ (a) The **Interconnector Frequency Droop** shall normally be 4% and shall be settable between 2% and 7%; ~~(c) No intentional time delays other than those agreed with the **TSO** shall be introduced into the frequency response system;~~ ~~(d)~~ (b) The **Frequency Deadband** shall normally be zero. Any non-zero deadband must be agreed in advance with the **TSO** and shall not exceed +/-15mHz. ~~(e) **Interconnectors** shall not act to control the frequency in an **External System** unless agreed in advance with the **TSO** and the **External System Operator.**~~ ‖ **Frequency Sensitive Mode** The following shall apply for **Interconnectors** for **Frequency Sensitive Mode** operation: (a) **Interconnector** shall be capable of responding to	⫴ Additionally, other than as permitted in accordance with OC.4.3.4.2.3: (a) The **Interconnector Frequency Droop** shall normally be 4% and shall be settable between 2% and 7%; (b) The **Frequency Deadband** shall normally be zero. Any non-zero deadband must be agreed in advance with the **TSO** and shall not exceed +/-15mHz. ‖ **Frequency Sensitive Mode** The following shall apply for **Interconnectors** for **Frequency Sensitive Mode** operation: (a) **Interconnector** shall be capable of responding to **Frequency** deviations on the **Transmission System** by adjusting its **Active Power** transmission within the minimum and maximum transmission capacity in each direction in accordance with the parameters given below. (b) A **Frequency Deadband** of no greater than +/-15mHz. (c) A **Frequency Response Insensitivity** of 15mHz. (d) An upward regulation (importing) **Interconnector Frequency Droop** between 0.1% and 12% with a default value set at 4%. (e) A downward regulation droop (exporting)

		Frequency deviations on the **Transmission System** by adjusting its **Active Power** transmission within the minimum and maximum transmission capacity in each direction in accordance with the parameters given below. (b) A **Frequency Deadband** of no greater than +/- 15mHz. (c) A **Frequency Response Insensitivity** of 15mHz. (d) An upward regulation (importing) ~~droop~~ **Interconnector Frequency Droop** between 0.1% and 12% with a default value set at 4%. (e) A downward regulation droop (exporting) ~~droop~~ **Interconnector Frequency Droop** between 0.1% and 12% with a default value set at 4%. (f) The maximum combined effect of **Frequency Response Insensitivity** and **Frequency Deadband** cannot exceed a value of +/- 15mHz. (g) Adjustment of **Active Power** response to a **Frequency** step change shall be delivered as soon as technically feasible and will be at or above the solid line in the following diagram in accordance with the parameters shown in Table CC.4.3.4.2.2. […] Table OC.4.3.4.2.2 Parameters for full activation of **Active Power Frequency** ~~response~~ **Response** resulting from **Frequency** step change […] An **Interconnector** linking various synchronous areas shall be capable of adjusting the full **Active Power Frequency** ~~response~~ **Response** when operating in **Frequency Sensitive Mode** at any time and for a continuous time period. In	**Interconnector Frequency Droop** between 0.1% and 12% with a default value set at 4%. (f) The maximum combined effect of **Frequency Response Insensitivity** and **Frequency Deadband** cannot exceed a value of +/- 15mHz. (g) Adjustment of **Active Power** response to a **Frequency** step change shall be delivered as soon as technically feasible and will be at or above the solid line in the following diagram in accordance with the parameters shown in Table CC.4.3.4.2.2. […] Table OC.4.3.4.2.2 Parameters for full activation of **Active Power Frequency Response** resulting from **Frequency** step change […] An **Interconnector** linking various synchronous areas shall be capable of adjusting the full **Active Power Frequency Response** when operating in **Frequency Sensitive Mode** at any time and for a continuous time period. In addition, the **Active Power** control of the **Interconnector** shall not have any adverse impact on the **Active Power Frequency Response**. **Limited Frequency Sensitive Mode – Over-Frequency** The following shall apply for **Interconnectors** operating in **Limited Frequency Sensitive Mode – Over- Frequency**: (a) **Interconnectors** shall be capable of adjusting **Active Power Frequency Response**, during both import and export, when the **Transmission System**

		addition, the **Active Power** control of the ~~Interconnector~~ **Interconnector** shall not have any adverse impact on the **Active Power Frequency** ~~response~~ **Response**. **Limited Frequency Sensitive Mode – Over-~~f~~Frequency** The following shall apply for **Interconnectors** operating in ~~Limited **Frequency** Sensitive Mode – Over- **Frequency**~~ **Limited Frequency Sensitive Mode – Over- Frequency**: (a) **Interconnector**s shall be capable of adjusting **Active Power Frequency** ~~response~~ **Response**, during both import and export, when the **Transmission System Frequency** rises to or above 50.2 Hz. (b) The **Active Power** response shall be capab~~a~~le of operating with a droop between 0.1% and 12% with default set at 4%. (c) An **Interconnector** shall be capable of adjusting its **Active Power** down to its minimum **Active Power** transmission capacity. Stable operation shall be ensured. When ~~Limited **Frequency** Sensitive Mode – Over- **Frequency**~~ **Limited Frequency Sensitive Mode – Over- Frequency** is active, hierarchy of control facilities shall be organised in accordance with CC.10.12.6. (d) **Interconnector**s shall be capable of adjusting **Active Power Frequency** ~~response~~ **Response** as fast as inherently technically feasible. **Limited Frequency Sensitive Mode – Under-~~f~~Frequency** The following shall apply for **Interconnectors** operating in ~~Limited **Frequency** Sensitive Mode – Under- **Frequency**~~	**Frequency** rises to or above 50.2 Hz. (b) The **Active Power** response shall be capable of operating with a droop between 0.1% and 12% with default set at 4%. (c) An **Interconnector** shall be capable of adjusting its **Active Power** down to its minimum **Active Power** transmission capacity. Stable operation shall be ensured. When **Limited Frequency Sensitive Mode – Over- Frequency** is active, hierarchy of control facilities shall be organised in accordance with CC.10.12.6. (d) **Interconnectors** shall be capable of adjusting **Active Power Frequency Response** as fast as inherently technically feasible. **Limited Frequency Sensitive Mode – Under-Frequency** The following shall apply for **Interconnectors** operating in **Limited Frequency Sensitive Mode – Under-Frequency**: (a) **Interconnectors** shall be capable of adjusting **Active Power Frequency Response**, during both import and export, when the **Transmission System Frequency** falls to or below 49.5 Hz. (b) The **Active Power** response shall be capable of operating with a droop between 0.1% and 12% with default set at 4%. (c) **Interconnectors** shall be capable of adjusting its **Active Power** up to its maximum **Active Power** transmission capacity. Stable operation shall be ensured. When **Limited Frequency Sensitive Mode – Under-Frequency** is active, hierarchy of control

		Limited Frequency Sensitive Mode – Under-Frequency: (a) **Interconnectors** shall be capable of adjusting **Active Power Frequency** ~~response~~ **Response**, during both import and export, when the **Transmission System Frequency** falls to or below 49.5 Hz. (b) The **Active Power** response shall be capab~~a~~le of operating with a droop between 0.1% and 12% with default set at 4%. (c) **Interconnectors** shall be capable of adjusting its **Active Power** up to its maximum **Active Power** transmission capacity. Stable operation shall be ensured. When ~~Limited **Frequency** Sensitive Mode – Under- **Frequency**~~ **Limited Frequency Sensitive Mode – Under-Frequency** is active, hierarchy of control facilities shall be organised in accordance with CC.10.12.6. (d) **Interconnectors** shall be capable of adjusting **Active Power Frequency** ~~response~~**Response** as fast as inherently technically feasible.	facilities shall be organised in accordance with CC.10.12.6. (d) **Interconnectors** shall be capable of adjusting **Active Power Frequency Response** as fast as inherently technically feasible.
OC.4.3.4.2.3	Replacing 'Frequency Control mode' with the defined term 'Frequency Response System' as per the updated definition in this modification proposal which proposes incorporating Interconnectors. This defined term is already used in the body of the Grid Code in this section OC.4.3.4.2 with reference to Interconnectors. Also, correcting missing reference to OC.4.3.4.2.3.	The **Interconnector Operator** may only restrict the action of the **Frequency** ~~**Control** mode~~ **Response System** in such as a manner as to contravene the terms of ~~θ~~ OC.4.3.4.2.2 where: (a) The action is essential for the safety of personnel and/or to avoid damage to **Plant**, in which case the **Interconnector Operator** shall inform the **TSO** of the restriction without undue delay; or (b) in order to (acting in accordance with **Good Industry Practice**) secure the reliability of the **Interconnector,** in which case the **Interconnector Operator** shall inform the **TSO** of the restriction without undue delay; or (c) the restriction is agreed between the **TSO** and the	The **Interconnector Operator** may only restrict the action of the **Frequency Response System** in such as a manner as to contravene the terms of OC.4.3.4.2.2 where: (a) The action is essential for the safety of personnel and/or to avoid damage to **Plant**, in which case the **Interconnector Operator** shall inform the **TSO** of the restriction without undue delay; or (b) in order to (acting in accordance with **Good Industry Practice**) secure the reliability of the **Interconnector,** in which case the **Interconnector Operator** shall inform the **TSO** of the restriction without undue delay; or (c) the restriction is agreed between the **TSO** and the

		Interconnector Operator in advance; or (d) the restriction is in accordance with a **Dispatch Instruction** given by the **TSO**.	**Interconnector Operator** in advance; or (d) the restriction is in accordance with a **Dispatch Instruction** given by the **TSO**.
OC.4.6.1.2	Updating clause to reflect upward and downward direction response provision of reserve.	The **Operating Margin** is the amount of reserve ~~(~~provided by ~~additional~~ an increase or reduction in **Generation**, **Active Power** transfer and/or **Demand** ~~reduction measures)~~ available ~~above~~ beyond that required to meet the expected **System Demand**. **Prudent Utility Practice** requires that a continuum of **Operating Margin** is provided to adequately limit, and then correct, the potential **Frequency** deviation which may occur due to a **Generation**/**Demand** imbalance.	The **Operating Margin** is the amount of reserve provided by an increase or reduction in **Generation**, **Active Power** transfer and/or **Demand** available beyond that required to meet the expected **System Demand**. **Prudent Utility Practice** requires that a continuum of **Operating Margin** is provided to adequately limit, and then correct, the potential **Frequency** deviation which may occur due to a **Generation**/**Demand** imbalance.
OC.4.6.1.3	Addition of 'may or' to allow for, for example, the fact that the TSO does not currently utilise Substitute Reserve or Contingency Reserve in the provision of Operating Margin but may do so.	OC.4.6 describes different types of reserve, as provided in a number of reserve time scales, which the **TSO** may or expects to utilise in the provision of the **Operating Margin**.	OC.4.6 describes different types of reserve, as provided in a number of reserve time scales, which the **TSO** may or expects to utilise in the provision of the **Operating Margin**.
OC.4.6.1.4	Updating clause to include reference to DSUs, who also have minimum connection and operating requirements outlined in the Connection Conditions of the Grid Code.	Minimum connection and operating requirements for **Generators**, ~~and~~ **Interconnectors** and **Demand Side Units** are outlined in the **Connection Conditions**.	Minimum connection and operating requirements for **Generators**, **Interconnectors** and **Demand Side Units** are outlined in the **Connection Conditions**.
OC.4.6.2.1	Addition of 'or may be' to allow for, for example, the fact that the TSO does not currently utilise Substitute Reserve or Contingency Reserve in the provision of Operating Margin but may do so. Bolding and capitalising 'Dispatch' as a defined term under the Grid Code.	The objective of OC.4.6 is to describe the various time scales for which reserves are or may be required, to describe the policy which will govern the ~~dispatch~~ **Dispatch** and control of the reserves, and to describe the procedures for monitoring the performance of **Generation Units,** participating **Interconnectors** and other reserve providers.	The objective of OC.4.6 is to describe the various time scales for which reserves are or may be required, to describe the policy which will govern the **Dispatch** and control of the reserves, and to describe the procedures for monitoring the performance of **Generation Units,** participating **Interconnectors** and other reserve providers.

	Addition of 'and control' to recognise that not all reserve is 'Dispatched' as defined under the Grid Code.		
OC.4.6.3.1	Updating clause to be more consistent with the incorporation of FFR into the Grid Code definition of 'Operating Reserve', where FFR adds an additional timescale that overlaps with the POR timescale. Listing types of Operating Reserve under this section as constituents of Operating Margin and which will be contracted and utilised by the TSO under the system services market to support frequency control. Bolding defined terms under the Grid Code relevant to frequency control. Indicating that Operating Reserve definitions can be found in the Glossary of the Grid Code, so as to remove the need to repeat them all in the body of the Grid Code, for conciseness.	The **Operating Margin** consists of: ➢ **Operating Reserve**, ~~(which is further broken down into 4 time scales), definitions,~~ which is comprised of: • **Fast Frequency Response Downward (FFR Downward)**; • **Fast Frequency Response Upward (FFR Upward)**; • **Primary Operating Reserve Downward (POR Downward)**; • **Primary Operating Reserve Upward (POR Upward)**; • **Secondary Operating Reserve Downward (SOR Downward)**; • **Secondary Operating Reserve Upward (SOR Upward)**; • **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)**; • **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**; • **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**; • **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**; ➢ **Replacement Reserve**, which is comprised of **Replacement Reserve Downward** (**RR Downward**) and **Replacement Reserve Upward** (**RR Upward**); ➢ **Substitute Reserve;** and ➢ **Contingency Reserve**. These reserve definitions relate to the time elapsed from the occurrence of a **Frequency** deviation, and are found in the Glossary of the **Grid Code** along with other associated definitions.	The **Operating Margin** consists of: ➢ **Operating Reserve**, which is comprised of: • **Fast Frequency Response Downward (FFR Downward)**; • **Fast Frequency Response Upward (FFR Upward)**; • **Primary Operating Reserve Downward (POR Downward)**; • **Primary Operating Reserve Upward (POR Upward)**; • **Secondary Operating Reserve Downward (SOR Downward)**; • **Secondary Operating Reserve Upward (SOR Upward)**; • **Tertiary Operating Reserve band 1 Downward (TOR1 Downward)**; • **Tertiary Operating Reserve band 1 Upward (TOR1 Upward)**; • **Tertiary Operating Reserve band 2 Downward (TOR2 Downward)**; • **Tertiary Operating Reserve band 2 Upward (TOR2 Upward)**; ➢ **Replacement Reserve**, which is comprised of **Replacement Reserve Downward** (**RR Downward**) and **Replacement Reserve Upward** (**RR Upward**); ➢ **Substitute Reserve;** and ➢ **Contingency Reserve**. These reserve definitions relate to the time elapsed from the occurrence of a **Frequency** deviation, and are found in the Glossary of the **Grid Code** along with other associated definitions.
~~**OC.4.6.3.2.1**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed	~~**Operating Reserve** is additional MW output provided from **Generation** plant, reduction of **Active Power** transfer to an **External System** or increase of **Active Power** transfer to the **Transmission System** by **Interconnectors,** or reduction in **Customer Demand,** which must be realisable in real time operation to contain and correct any potential **Transmission**~~	

	to the Glossary of the Grid Code for the full definitions.	~~**System Frequency** deviation to an acceptable level.~~	
~~**OC.4.6.3.2.2**~~	Proposing the removal of this clause, but that the text be modified as appropriate and included under OC.4.6.3.1.	~~**Operating Reserve** definitions relate to the time elapsed from the occurrence of an event which has initiated a **Frequency** disturbance. The definition of the time at which the event is deemed to have occurred and other associated definitions are addressed in OC.4.6.4.~~	
~~**OC.4.6.3.3**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Primary Operating Reserve (POR)**~~	
~~**OC.4.6.3.3.1**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Primary Operating Reserve (POR)** is the additional MW output (and/or reduction in **Demand**) required at the **Frequency** nadir (minimum), compared to the pre-incident output (or **Demand**), which is fully available and sustainable between 5 seconds and 15 seconds after the **Event** and where the nadir occurs between 5 and 15 seconds after the **Event.**~~	
~~**OC.4.6.3.3.2**~~	Removal of clause referencing the Frequency nadir and POR monitoring, as this no longer aligns with POR performance monitoring custom and practice.	~~If the actual **Frequency** nadir occurs less than 5 seconds or more than 15 seconds after the **Event**, then for the purpose of **POR** monitoring (in accordance with 0) the nadir is deemed to be the lowest Frequency which did occur between 5 and 15 seconds after the **Event.**~~	
~~**OC.4.6.3.4**~~	Proposing the removal of sections that would otherwise just be	~~**Secondary Operating Reserve (SOR)**~~	

	identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.		
~~**OC.4.6.3.4.1**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Secondary Operating Reserve (SOR)** is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**), which is fully available and sustainable over the period from 15 to 90 seconds following an **Event.**~~	
~~**OC.4.6.3.5**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Tertiary Operating Reserve**~~	
~~**OC.4.6.3.5.1**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Tertiary Operating Reserve band 1 (TOR1)** is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 90 seconds to 5 minutes following an **Event.**~~	

~~**OC.4.6.3.5.2**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Tertiary Operating Reserve band 2 (TOR2)** is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 5 minutes to 20 minutes following an **Event.**~~	
~~**OC.4.6.3.6**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Replacement Reserve** is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 20 minutes to 4 hours following an **Event.**~~	
~~**OC.4.6.3.7**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed to the Glossary of the Grid Code for the full definitions.	~~**Substitute Reserve** is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 4 hours to 24 hours following an **Event**.~~	
~~**OC.4.6.3.8**~~	Proposing the removal of sections that would otherwise just be identical to the information found in the Glossary of the Grid Code. Instead, proposing that the relevant defined terms be listed under OC.4.6.3.1, and readers be directed	~~**Contingency Reserve** is the margin of Availability over forecast **Demand**, which is required in the period from 24 hours ahead down to real time, to cover against uncertainties in availability of generation capacity and also against weather forecast and **Demand** forecast errors. **Contingency Reserve** is provided by generation plant which is not required to be **Synchronised**, but which must be held available to **Synchronise** within a limited time~~	

	to the Glossary of the Grid Code for the full definitions.	~~scale.~~	
OC.4.6.4	Removing 'Operating' here, as 'Replacement Reserve' is defined separately from 'Operating Reserve'.	**Definitions Associated with ~~an Operating~~ Reserve ~~Incident~~** and **Frequency Events**	**Definitions Associated with Reserve ~~Incident~~** and **Frequency Events**
OC.4.6.4.1	Amended to refer directly to 'Replacement Reserve', which is defined separately from 'Operating Reserve' under the Grid Code.	Following the occurrence of a significant **Frequency** ~~disturbance~~ deviation, the **TSO** shall monitor, in accordance with OC.10.4, and analyse the adequacy of the provision of **Operating Reserve** and **Replacement Reserve**. For the purposes of this performance analysis, the following criteria have been defined.	Following the occurrence of a significant **Frequency** deviation, the **TSO** shall monitor, in accordance with OC.10.4, and analyse the adequacy of the provision of **Operating Reserve** and **Replacement Reserve**. For the purposes of this performance analysis, the following criteria have been defined.
OC.4.6.4.2	Updated to align with existing performance monitoring requirements.	A significant **Frequency** ~~disturbance event~~ deviation which can be considered a **Frequency Event** is deemed to have occurred if the **Frequency** falls below 49.70 Hz or rises above 50.3 Hz.	A significant **Frequency** deviation which can be considered a **Frequency Event** is deemed to have occurred if the **Frequency** falls below 49.70 Hz or rises above 50.3 Hz.
OC.4.6.4.3	Replacing 'event' with defined terms 'Frequency Event'. Updated to align with existing performance monitoring requirements.	The time of occurrence of the ~~event~~ **Frequency Event** is defined as the ~~last~~ first time ~~at which~~ the **Frequency** ~~fell~~ passes through the level of 49.80 Hz or 50.2 Hz.~~, prior to the occurrence of the **Frequency** nadir.~~	The time of occurrence of the **Frequency Event** is defined as the first time the **Frequency** passes through the level of 49.80 Hz or 50.2 Hz.
OC.4.6.4.5	Bolding and capitalising defined terms under the Grid Code. Including reference to Active Power transfers for Interconnectors, as 'MW Output' is specific to Generators under the Grid Code. Removing reference to customer, as 'Demand' is defined as "The amount of electrical power consumed by the **Power System**…", which is "The **Transmission System** and all **User System's** within the Republic of Ireland."	The ~~pre-incident~~ value of ~~MW output~~ **MW Output** of a **Generation Unit**, **Active Power** transfer of an **Interconnector**, or MW **Demand** ~~of a **Customer**,~~ before the start of the **Frequency Event** is the appropriate MW value averaged over the period between 60 and 30 seconds prior to the **Frequency Event.**	The value of **MW Output** of a **Generation Unit**, **Active Power** transfer of an **Interconnector**, or MW **Demand** before the start of the **Frequency Event** is the appropriate MW value averaged over the period between 60 and 30 seconds prior to the **Frequency Event.**

OC.4.6.5.1.1	Addition of 'may' as the TSO does not currently utilise 'Contingency Reserve', but it is a possible metric for assessing Operating Margin/Capacity Adequacy which may be used by the TSO. Bolding and capitalising defined terms under the Grid Code. Inclusion of DSUs as another relevant user type were the TSO to utilise Contingency Reserve.	The **TSO** ~~shall~~ may determine the amount of **Contingency Reserve** required for each time scale up to 24 hours ahead, taking due consideration of relevant factors, including but not limited to the following: (a) historically **Availability Factor** and reliability performance of individual **Generation Units;** (b) notified risk to the reliability of individual **Generation Units**; and (c) **Demand** forecasting uncertainties; ~~and~~ (d) status and ~~availability~~ **Availability** of **Interconnectors**~~.~~; and (e) status and **Availability** of **Demand Side Units**.	The **TSO** may determine the amount of **Contingency Reserve** required for each time scale up to 24 hours ahead, taking due consideration of relevant factors, including but not limited to the following: (a) historically **Availability Factor** and reliability performance of individual **Generation Units;** (b) notified risk to the reliability of individual **Generation Units**; and (c) **Demand** forecasting uncertainties; (d) status and **Availability** of **Interconnectors**; and (e) status and **Availability** of **Demand Side Units**.
OC.4.6.5.2	Referring directly to 'Replacement Reserve', which is defined separately from 'Operating Reserve' under the Grid Code.	**Operating Reserve** and **Replacement Reserve**	**Operating Reserve** and **Replacement Reserve**
OC.4.6.5.2.1	Bolding and capitalising defined terms under the Grid Code. Referring directly to 'Replacement Reserve', which is defined separately from 'Operating Reserve' under the Grid Code. Including reference to Frequency rises to acknowledge both upward and downward frequency regulation.	The **TSO** shall determine the amount of **Primary Operating Reserve**, **Secondary Operating Reserve, Tertiary Operating Reserve** and **Replacement Reserve** to be carried at any time to ensure ~~system~~ **System** security. This will not be constrained by the **Trading and Settlement Code.** Due consideration will be taken of relevant factors, including but not limited to the following: (a) the relevant **TSO** operating policy in existence at that time; (b) the extent to which **Customer Disconnections** allowed under the relevant standard have already occurred within the then relevant period; (c) the elapsed time since the last **Customer Disconnection** incident;	The **TSO** shall determine the amount of **Primary Operating Reserve**, **Secondary Operating Reserve, Tertiary Operating Reserve** and **Replacement Reserve** to be carried at any time to ensure **System** security. This will not be constrained by the **Trading and Settlement Code.** Due consideration will be taken of relevant factors, including but not limited to the following: (a) the relevant **TSO** operating policy in existence at that time; (b) the extent to which **Customer Disconnections** allowed under the relevant standard have already occurred within the then relevant period; (c) the elapsed time since the last **Customer Disconnection** incident;

		(d) particular events of national or widespread significance, which may justify provision of additional **Operating Reserve** and **Replacement Reserve**; (e) the cost of providing **Operating Reserve** and **Replacement Reserve** at any point in time; (f) the magnitude and number of the largest **Generation** infeeds to the **Transmission System** at that time, including infeeds over **External Interconnections** and also over single transmission feeders within the **Transmission System** and also the amount of **Generation** that could be lost following a single **Contingency**; (g) ambient weather conditions, insofar as they may affect (directly or indirectly) **Generation Unit** and/or **Transmission System** reliability; (h) the predicted **Frequency** drop on loss of the largest infeed as may be determined through simulation using a dynamic model of the **Power System**; (i) the predicted **Frequency** rise on loss of the largest outfeed as may be determined through simulation using a dynamic model of the **Power System**; (j) ~~(i)~~ constraints imposed by agreements in place with **Externally Interconnected Parties**; (k) uncertainty in future **Generation** output.	(d) particular events of national or widespread significance, which may justify provision of additional **Operating Reserve** and **Replacement Reserve**; (e) the cost of providing **Operating Reserve** and **Replacement Reserve** at any point in time; (f) the magnitude and number of the largest **Generation** infeeds to the **Transmission System** at that time, including infeeds over **External Interconnections** and also over single transmission feeders within the **Transmission System** and also the amount of **Generation** that could be lost following a single **Contingency**; (g) ambient weather conditions, insofar as they may affect (directly or indirectly) **Generation Unit** and/or **Transmission System** reliability; (h) the predicted **Frequency** drop on loss of the largest infeed as may be determined through simulation using a dynamic model of the **Power System**; (i) the predicted **Frequency** rise on loss of the largest outfeed as may be determined through simulation using a dynamic model of the **Power System**; (j) constraints imposed by agreements in place with **Externally Interconnected Parties**; (k) uncertainty in future **Generation** output.
OC.4.6.5.3	Referring directly to 'Replacement Reserve', which is defined separately from 'Operating Reserve' under the Grid Code.	The **TSO** shall keep records of significant alterations to the **Operating Reserve** and **Replacement Reserve** policy so determined under OC.4.6.6.2.	The **TSO** shall keep records of significant alterations to the **Operating Reserve** and **Replacement Reserve** policy so determined under OC.4.6.6.2.
OC.4.6.6	Replacing 'Operating Reserve' with 'Operating Margin', as the Grid Code	**Responsibilities of the TSO in Respect of Operating ~~Reserve~~ Margin**	**Responsibilities of the TSO in Respect of Operating Margin**

	definition for Operating Margin also encompasses 'Replacement Reserve'.		
OC.4.6.6.1	Addition of 'and/or control' in order to reference contribution of controllable units to provision or reserve. Removal of reference to 'generation' so as not to exclude other user types that may contribute to reserve provision. Bolding and capitalising 'System' as a defined term under the Grid Code.	The **TSO** shall in accordance with **Prudent Utility Practice** make reasonable endeavours to **Dispatch** and/or control ~~generation~~ **Users** and otherwise operate the ~~system~~ **System** in compliance with the **TSO's** determinations as to **Operating Margin** policies made from time to time.	The **TSO** shall in accordance with **Prudent Utility Practice** make reasonable endeavours to **Dispatch** and/or control **Users** and otherwise operate the **System** in compliance with the **TSO's** determinations as to **Operating Margin** policies made from time to time.
OC.4.6.6.2	Addition of 'and/or control' in order to reference contribution of controllable units to provision or reserve. Removal of specific reference to 'Generation Units' and replaced with 'Users' so the clause is applicable to all relevant users. 'Operating Reserve' replaced with 'Operating Margin' to also encompass other reserve system services, such as Replacement Reserve.	The **TSO's** sole responsibility, having met its obligations under the preceding provisions of OC.4.6, shall be to, acting in accordance with **Prudent Utility Practice**, **Dispatch** and/or control such ~~**Generation Units**~~ **Users** as are available required to meet: (a) **System Demand**; and (b) the level of **Operating** ~~**Reserve**~~ **Margin** required by the **TSO's** then **Operating** ~~**Reserve**~~ **Margin** policies.	The **TSO's** sole responsibility, having met its obligations under the preceding provisions ofOC.4.6, shall be to, acting in accordance with **Prudent Utility Practice**, **Dispatch** and/or control such **Users** as are available required to meet: (a) **System Demand**; and (b) the level of **Operating Margin** required by the **TSO's** then **Operating Margin** policies.
OC.7.1.11	Removal of specific reference to 'Generator or Interconnector Operator' and 'Generation Unit or Interconnector' and replaced with 'User' and 'Plant and/or Apparatus' so the clause is applicable to all relevant users. Bolding and capitalising 'System' as a defined term under the Grid Code.	When an **Event** has been reported to the **TSO** by a ~~**Generator** or **Interconnector Operator**~~ **User** under OC.7.1 and it is necessary in order for the ~~**Generator** or **Interconnector Operator**~~ **User** to assess the implications of the **Event** on their ~~system~~ **System** more accurately, the ~~**Generator** or **Interconnector Operator**~~ **User** may ask the **TSO** for details of the fault levels from the **Transmission System** to their ~~**Generation Unit** or **Interconnector**~~ **Plant** and/or **Apparatus** at the time of the **Event**, and the **TSO** will, as soon as reasonably practicable, give the	When an **Event** has been reported to the **TSO** by a **User** under OC.7.1 and it is necessary in order for the **User** to assess the implications of the **Event** on their **System** more accurately, the **User** may ask the **TSO** for details of the fault levels from the **Transmission System** to their **Plant** and/or **Apparatus** at the time of the **Event**, and the **TSO** will, as soon as reasonably practicable, give the **User** that information provided that the **TSO** has that information.

		~~**Generator** or **Interconnector**~~ **User** that information provided that the **TSO** has that information.	
OC.7.2.4.7.3	Addition of text to reference the requirement that DSU Responsible Operators shall be authorised to receive and acknowledge receipt of communications from the TSO during System Emergency conditions that include requests for operation outside the declared values of Ancillary Service capability and Operating Characteristics of the DSU. Amended to align with similar clauses for other relevant users.	For **Demand Side Unit Operator**, the **Control Facility** shall be staffed by a **Responsible Operator(s)** who shall respond to communications from the **TSO** without undue delay (except where otherwise provided for by agreement between the **Demand Side Unit Operator** and the **TSO**, such agreement not to be unreasonably withheld) and are of suitable experience and training and are authorised to perform functions on behalf of the **Demand Side Unit Operator** as follows: (a) to accept and execute **Dispatch Instructions**; (b) to receive and acknowledge receipt of requests, for amongst other matters, operation outside the **Declared** values of **Demand Side Unit MW Availability**, **Ancillary Service** capability, or **Operating Characteristics** of the **Demand Side Unit** during **System Emergency Conditions**.	For **Demand Side Unit Operator**, the **Control Facility** shall be staffed by a **Responsible Operator(s)** who shall respond to communications from the **TSO** without undue delay (except where otherwise provided for by agreement between the **Demand Side Unit Operator** and the **TSO**, such agreement not to be unreasonably withheld) and are of suitable experience and training and are authorised to perform functions on behalf of the **Demand Side Unit Operator** as follows: (a) to accept and execute **Dispatch Instructions**; (b) to receive and acknowledge receipt of requests, for amongst other matters, operation outside the **Declared** values of **Demand Side Unit MW Availability**, **Ancillary Service** capability, or **Operating Characteristics** of the **Demand Side Unit** during **System Emergency Conditions**.
OC.7.2.4.7.4	Addition of text to reference the requirement that a DSU Responsible Manager shall be authorised to make declarations of the DSU Ancillary Service capability and Operating Characteristics on behalf of the DSU Operator. Amended to align with similar clauses for other relevant users.	The **Responsible Manager** shall be authorised by the **Demand Side Unit Operator** to perform the following functions on behalf of the **Demand Side Unit Operator**: (a) to make estimates in accordance with **Good Industry Practice** as to the **Demand Side Unit MW Availability**; (b) to make **Declarations** of the **Demand Side Unit MW Availability**, **Ancillary Service** capability and **Operating Characteristics** of the **Demand Side Unit** for the **Demand Side Unit Operator**; and (c) to communicate with respect to issues regarding **Outages** of each **Individual Demand Site** within the **Demand Side Unit**.	The **Responsible Manager** shall be authorised by the **Demand Side Unit Operator** to perform the following functions on behalf of the **Demand Side Unit Operator**: (a) to make estimates in accordance with **Good Industry Practice** as to the **Demand Side Unit MW Availability**; (b) to make **Declarations** of the **Demand Side Unit MW Availability**, **Ancillary Service** capability and **Operating Characteristics** of the **Demand Side Unit** for the **Demand Side Unit Operator**; and (c) to communicate with respect to issues regarding **Outages** of each **Individual Demand Site** within the **Demand Side Unit**. The **Demand Side Unit Operator** may, from time to time, notify a replacement contact location and personnel which meets the

		The **Demand Side Unit Operator** may, from time to time, notify a replacement contact location and personnel which meets the foregoing requirements.	foregoing requirements.
OC.8.1.2	Addition of 'and control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	By their nature, **Operational Tests** may impinge on either or both of: (a) the **TSO's** responsibilities in respect of the **Transmission System**, including **Dispatch** and control of **Generation**, **Interconnectors** and **Demand Side Unit MW Availability**; and (b) the operations of **Users** and the quality and continuity of supply of electricity to **Users**.	By their nature, **Operational Tests** may impinge on either or both of: (a) the **TSO's** responsibilities in respect of the **Transmission System**, including **Dispatch** and control of **Generation**, **Interconnectors** and **Demand Side Unit MW Availability**; and (b) the operations of **Users** and the quality and continuity of supply of electricity to **Users**.
OC.8.2.3	Replacing specific references to 'Generators or Interconnector Operators' and 'Generation Units or Interconnectors' with 'Users' so this clause is applicable to all relevant users. Addition of 'or control setpoints' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational	OC.8 is not intended to deal with tests which may be called routinely by the **TSO** in order to assess compliance of **Users** with their design, operating and connection requirements as specified in the **Grid Code** and in each **User's Connection Agreement, Ancillary Services Agreements** and **System Support Agreement**, or to assess that ~~**Generators** or **Interconnector Operators**~~ **Users** are in compliance with their **Registered Data** as notified by **Declarations**, where appropriate, or to determine that ~~**Generation Units** or **Interconnectors**~~ **Users** are in compliance with **Dispatch Instructions** or control setpoints. These issues are covered under OC.10 (**Monitoring**, **Testing** and **Investigation**).	OC.8 is not intended to deal with tests which may be called routinely by the **TSO** in order to assess compliance of **Users** with their design, operating and connection requirements as specified in the **Grid Code** and in each **User's Connection Agreement, Ancillary Services Agreements** and **System Support Agreement**, or to assess that **Users** are in compliance with their **Registered Data** as notified by **Declarations**, where appropriate, or to determine that **Users** are in compliance with **Dispatch Instructions** or control setpoints. These issues are covered under OC.10 (**Monitoring**, **Testing** and **Investigation**).

	tests and declarations of ancillary service capability.		
OC.8.4.2	Addition of 'and control' in order to reference units controllable by the TSO. Included in this modification proposal as this clause refers to operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour, and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	**Operational Tests** required by the **TSO** from time to time shall include, but shall not be limited to the following: (i) Tests involving the controlled application of **Frequency** and/or **Voltage** variations aimed at gathering information on **Power System** behaviour; (ii) **Power System Restoration** tests; (iii) Testing of standing procedures for **System Emergency Conditions** and **Alert** conditions; (iv) Testing or monitoring of **Power Quality** under various **Power System** conditions and **Dispatch** and control configurations.	**Operational Tests** required by the **TSO** from time to time shall include, but shall not be limited to the following: (i) Tests involving the controlled application of **Frequency** and/or **Voltage** variations aimed at gathering information on **Power System** behaviour; (ii) **Power System Restoration** tests; (iii) Testing of standing procedures for **System Emergency Conditions** and **Alert** conditions; (iv) Testing or monitoring of **Power Quality** under various **Power System** conditions and **Dispatch** and control configurations.
OC.8.6.2.5	Addition of 'or control setpoints' and 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	where the **User** is a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator**, the **Dispatch** or **Dispatches** or control setpoints required by the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** for completion of the test, if any, including the duration of **Dispatch** or control shall be supplied to the **TSO** as part of the proposal. Where the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** may not know the entire **Dispatches** or control setpoints required for completion of the test until part of the test is completed then the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** when proposing the test shall: […]	where the **User** is a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator**, the **Dispatch** or **Dispatches** or control setpoints required by the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** for completion of the test, if any, including the duration of **Dispatch** or control shall be supplied to the **TSO** as part of the proposal. Where the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** may not know the entire **Dispatches** or control setpoints required for completion of the test until part of the test is completed then the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** when proposing the test shall: […]
OC.8.6.3	Addition of ', or to receive a control set-point to provide,' in order to reference units which are controllable by the TSO.	A request by the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** for an **Operational Test** requiring a **Generation Unit**, **Interconnector** or **Demand Side Unit** to be **Dispatched** to, or to receive a control	A request by the **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** for an **Operational Test** requiring a **Generation Unit**, **Interconnector** or **Demand Side Unit** to be **Dispatched** to, or to receive a control

	Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and because this clause and OC.8.7.3 refer to interactions between operational tests and declarations of ancillary service capability.	set-point to provide, a particular **MW Output** or operating condition shall not be considered a **Re-declaration** of **Availability**, **Ancillary Service** capability, or **Operating Characteristics**.	set-point to provide, a particular **MW Output** or operating condition shall not be considered a **Re-declaration** of **Availability**, **Ancillary Service** capability, **Operating Characteristics**.
OC.8.7.3	Addition of 'or control setpoint' and 'or control' in order to reference units controllable by the TSO. Bolding and capitalising 'Declared' as a defined term under the Grid Code. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and because this clause and OC.8.6.3 refer to interactions between operational tests and declarations of ancillary service capability.	Where an **Operational Test** proposed by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** in respect of one of its **Generation Units**, **Interconnector** or **Demand Side Units** requires a **Dispatch** or control setpoint that exceeds the currently ~~declared~~ **Declared** values of **Availability**, **Ancillary Service** capability where applicable, or **Operating Characteristics** of the **Generation Unit**, **Interconnector** or **Demand Side Units**, then the **TSO** may so **Dispatch** or control the **Generation Unit**, **Interconnector** or **Demand Side Units** for the period required for the **Operational Test**, in accordance with the relevant provisions of the **Grid Code**.	Where an **Operational Test** proposed by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator** in respect of one of its **Generation Units**, **Interconnector** or **Demand Side Units** requires a **Dispatch** or control setpoint that exceeds the currently **Declared** values of **Availability**, **Ancillary Service** capability where applicable, or **Operating Characteristics** of the **Generation Unit**, **Interconnector** or **Demand Side Units**, then the **TSO** may so **Dispatch** or control the **Generation Unit**, **Interconnector** or **Demand Side Units** for the period required for the **Operational Test**, in accordance with the relevant provisions of the **Grid Code**.
OC.8.8.3	Addition of 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational	On approval by the **TSO** of an **Operational Test** proposed by a **User**, the **TSO** shall contact the **User** outlining the proposed **Dispatch** or control procedure and schedule.	On approval by the **TSO** of an **Operational Test** proposed by a **User**, the **TSO** shall contact the **User** outlining the proposed **Dispatch** or control procedure and schedule.

	tests and declarations of ancillary service capability.		
OC.8.8.3.1	Addition of 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	On receipt of the proposed **Dispatch** or control procedure and schedule of the **Operational Test**, the **Test Proposer** shall notify the **TSO** without undue delay, of the **Test Proposer's** acceptance or rejection of the proposed **Dispatch** or control procedure and schedule for the test.	On receipt of the proposed **Dispatch** or control procedure and schedule of the **Operational Test**, the **Test Proposer** shall notify the **TSO** without undue delay, of the **Test Proposer's** acceptance or rejection of the proposed **Dispatch** or control procedure and schedule for the test.
OC.8.8.3.2	Addition of 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	On notification of rejection of the proposed **Dispatch** or control procedure and schedule for the **Operational Test** by the **Test Proposer**, then the **Operational Test** shall not take place. The **Test Proposer** may enter into discussions with the **TSO** as to an alternative schedule for the **Operational Test**, or may request a different **Operational Test** or may request the **Operational Test** at an alternative time.	On notification of rejection of the proposed **Dispatch** or control procedure and schedule for the **Operational Test** by the **Test Proposer**, then the **Operational Test** shall not take place. The **Test Proposer** may enter into discussions with the **TSO** as to an alternative schedule for the **Operational Test**, or may request a different **Operational Test** or may request the **Operational Test** at an alternative time.
OC.8.8.3.3	Addition of 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application	On notification of acceptance of the proposed **Dispatch** or control procedure and schedule for the **Operational Test** by the **Test Proposer**, the **TSO** shall inform other **Users** as to the scheduled time and nature of the test, if in the opinion of the **TSO** those	On notification of acceptance of the proposed **Dispatch** or control procedure and schedule for the **Operational Test** by the **Test Proposer**, the **TSO** shall inform other **Users** as to the scheduled time and nature of the test, if in the opinion of the **TSO** those **Users** will or may be significantly affected by the test,

	of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	**Users** will or may be significantly affected by the test, or otherwise as dictated by standing arrangements.	or otherwise as dictated by standing arrangements.
OC.8.8.3.5	Addition of 'or control' and 'or control setpoint' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	Notification by the **TSO** to the **Test Proposer** of the proposed **Dispatch** or control procedure and schedule for an **Operational Test**, or notification by the **Test Proposer** to the **TSO** of acceptance of the proposed **Dispatch** or control procedure and schedule, does not constitute a **Dispatch Instruction** or control setpoint from the **TSO** to the **Test Proposer**.	Notification by the **TSO** to the **Test Proposer** of the proposed **Dispatch** or control procedure and schedule for an **Operational Test**, or notification by the **Test Proposer** to the **TSO** of acceptance of the proposed **Dispatch** or control procedure and schedule, does not constitute a **Dispatch Instruction** or control setpoint from the **TSO** to the **Test Proposer**.
OC.8.8.4	Addition of 'Interconnector Operator, Generator Aggregator or Demand Side Unit Operator' as other relevant users. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational	On rejection of the proposed **Operational Test** by the **TSO**, the **Test Proposer** may enter into discussions with the **TSO** as to an alternative schedule for the **Operational Test**, or may request a different **Operational Test** or may request the **Operational Test** at an alternative time. If the amended proposal for an **Operational Test** is approved by the **TSO**, and the **User** requesting the **Operational Test** is a **Generator, Interconnector Operator, Generator Aggregator** or **Demand Side Unit Operator**, then OC.8.8.3 shall apply.	On rejection of the proposed **Operational Test** by the **TSO**, the **Test Proposer** may enter into discussions with the **TSO** as to an alternative schedule for the **Operational Test**, or may request a different **Operational Test** or may request the **Operational Test** at an alternative time. If the amended proposal for an **Operational Test** is approved by the **TSO**, and the **User** requesting the **Operational Test** is a **Generator, Interconnector Operator**, **Generator Aggregator** or **Demand Side Unit Operator**, then OC.8.8.3 shall apply.

	tests and declarations of ancillary service capability.		
OC.8.10.2	Bolding and capitalising 'Dispatched' as a defined term under the Grid Code, and addition of 'and controlled' and 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	The **TSO** shall use reasonable endeavours to ensure that scheduled **Operational Tests** are ~~dispatched~~ **Dispatched** and controlled in accordance with the agreed **Dispatch** or control procedures.	The **TSO** shall use reasonable endeavours to ensure that scheduled **Operational Tests** are **Dispatched** and controlled in accordance with the agreed **Dispatch** or control procedures.
OC.8.10.3	Addition of 'or control' in order to reference units controllable by the TSO. Included in this modification proposal as operational tests include tests involving the controlled application of frequency variations aimed at gathering information on power system behaviour (OC.8.4.2), and for consistency with changes proposed to OC.8.6.3 and OC.8.7.3 which refer to interactions between operational tests and declarations of ancillary service capability.	Where the **TSO** foresees a requirement or likely requirement to cancel, postpone or otherwise significantly alter an agreed **Dispatch** or control procedure and schedule, then the **TSO** shall inform the **Test Proposer** as soon as reasonably possible. In this case the provisions of OC.8.10.4 and OC.8.10.5 apply.	Where the **TSO** foresees a requirement or likely requirement to cancel, postpone or otherwise significantly alter an agreed **Dispatch** or control procedure and schedule, then the **TSO** shall inform the **Test Proposer** as soon as reasonably possible. In this case the provisions of OC.8.10.4 and OC.8.10.5 apply.
OC.9.4.1	Addition of 'Interconnector Operators' as a relevant user that the	In the event of a **System Emergency Condition** or imminent shortfall of MW capacity, the **TSO** may issue any of several **Alerts** to ~~the~~ **Generators**, **Interconnector Operators**, key	In the event of a **System Emergency Condition** or imminent shortfall of MW capacity, the **TSO** may issue any of several **Alerts** to **Generators**, **Interconnector Operators**, key

	TSO may issue 'Alerts' to in a system emergency. Amended in this modification proposal as alerts have relevancy with regards to frequency events and frequency control.	**Transmission Stations, Distribution Control Centres** and **Demand Side Unit Operators**. These **Alerts** may include an **Alert State**, **Emergency State** or **Blackout State**, or other **Alerts** as may be agreed from time to time.	**Transmission Stations, Distribution Control Centres** and **Demand Side Unit Operators**. These **Alerts** may include an **Alert State**, **Emergency State** or **Blackout State**, or other **Alerts** as may be agreed from time to time.
OC.10.1.1	Removal of 'generation' so clause is applicable to all relevant user types. Addition of 'and control' in order to reference units controllable by the TSO. Amend in this modification proposal as OC.10 Monitoring, Testing and Investigation is intended to cover compliance of Users with their design, operating and connection requirements as specified in the Grid Code and in each User's Connection Agreement, Ancillary Services Agreements and System Support Agreement, compliance with their Registered Data as notified by Declarations, where appropriate, and compliance with dispatch instructions and control setpoints from the TSO.	In order to discharge its responsibilities in respect of the safe, secure and economic operation of the **Transmission System** and in respect of ~~generation~~ **Dispatch** and control, the **TSO** will need to carry out certain **Monitoring**, **Testing** and **Investigation** in respect of the performance of **Users' Plant**.	In order to discharge its responsibilities in respect of the safe, secure and economic operation of the **Transmission System** and in respect of **Dispatch** and control, the **TSO** will need to carry out certain **Monitoring**, **Testing** and **Investigation** in respect of the performance of **Users' Plant**.
OC.10.2.2	Addition of 'and whether Controllable PPMs comply with control setpoints' in order to fully reference units controllable by the TSO. Addition of other relevant users. Amend in this modification proposal as OC.10 Monitoring, Testing and Investigation is intended to cover compliance of Users with their design, operating and connection	In order to achieve the primary objective set out in OC.10.2.1, OC.10 establishes procedures for **Monitoring**, **Testing** and **Investigation**. In particular, this facilitates adequate assessment of each of the following: (a) whether **Centrally Dispatched Generation Units (CDGU)**, **Interconnectors** and **Demand Side Units** comply with **Dispatch Instructions**, and whether **Controllable PPMs** comply with control setpoints;	In order to achieve the primary objective set out in OC.10.2.1, OC.10 establishes procedures for **Monitoring**, **Testing** and **Investigation**. In particular, this facilitates adequate assessment of each of the following: (a) whether **Centrally Dispatched Generation Units (CDGU)**, **Interconnectors** and **Demand Side Units** comply with **Dispatch Instructions**, and whether **Controllable PPMs** comply with control setpoints;

	requirements as specified in the Grid Code and in each User's Connection Agreement, Ancillary Services Agreements and System Support Agreement, compliance with their Registered Data as notified by Declarations, where appropriate, and compliance with dispatch instructions and control setpoints from the TSO.	(b) whether **Generators**, **Interconnectors**, **Demand Side Unit Operators** and **Generator Aggregators** are in compliance with **Declarations** of **Availability**, **Ancillary Services** capabilities, **Operating Characteristics** and any other data required to be registered by those **Generators**, **Interconnector~~s~~ Operators**, **Generator Aggregators** and **Demand Side Unit Operators** under the **Grid Code**; […]	(b) whether **Generators**, **Interconnectors**, **Demand Side Unit Operators** and **Generator Aggregators** are in compliance with **Declarations** of **Availability**, **Ancillary Services** capabilities, **Operating Characteristics** and any other data required to be registered by those **Generators**, **Interconnector Operators**, **Generator Aggregators** and **Demand Side Unit Operators** under the **Grid Code**; […]
OC.10.4.4.1	Addition of 'and control setpoints' in order to reference units controllable by the TSO. Amend in this modification proposal as OC.10 Monitoring, Testing and Investigation is intended to cover compliance of Users with their design, operating and connection requirements as specified in the Grid Code and in each User's Connection Agreement, Ancillary Services Agreements and System Support Agreement, compliance with their Registered Data as notified by Declarations, where appropriate, and compliance with dispatch instructions and control setpoints from the TSO.	OC.10.4.4 Performance parameters that the **TSO** shall **Monitor** may include, but are not limited to, the following: OC.10.4.4.1 Compliance with **Dispatch Instructions** and control setpoints; […]	OC.10.4.4 Performance parameters that the **TSO** shall **Monitor** may include, but are not limited to, the following: OC.10.4.4.1 Compliance with **Dispatch Instructions** and control setpoints; […]
OC.10.4.4.2	Addition of other relevant users as contributors to frequency control and reserve provision. Addition of 'Frequency Response and 'Declared Interconnector Frequency Droop' as defined terms specific to Interconnectors. Removal of reference to Tertiary Operating Reserve band 2 as this is	OC.10.4.4 Performance parameters that the **TSO** shall **Monitor** may include, but are not limited to, the following: […] OC.10.4.4.2 Compliance with **Declarations** including, without limitation, in respect of: (a) **Primary**, **Secondary** and **Tertiary Operating Reserve** provided by each ~~of a **Generator's**~~ **Generation Unit~~s~~**, **Interconnector** or **Demand**	OC.10.4.4 Performance parameters that the **TSO** shall **Monitor** may include, but are not limited to, the following: […] OC.10.4.4.2 Compliance with **Declarations** including, without limitation, in respect of: (a) **Primary**, **Secondary** and **Tertiary Operating Reserve** provided by each **Generation Unit, Interconnector** or **Demand Side Unit** following

	covered under reference to 'Tertiary Operating Reserve' in part (a).	Side Unit following a ~~Low~~ **Frequency Event** on the **Transmission System**; (b) **Frequency Regulation** and **Frequency Response** provided by each **Generation Unit** and **Interconnector** (to confirm that it is consistent with the **Declared Governor Droop** and **Declared Interconnector Frequency Droop**) and; (c) ~~**Tertiary Operating Reserve 2** and~~ **Replacement Reserve** provided by each ~~of a Generator's Generation Units~~ **Generation Unit, Interconnector** or **Demand Side Unit**.	a **Frequency Event** on the **Transmission System**; (b) **Frequency Regulation** and **Frequency Response** provided by each **Generation Unit** and **Interconnector** (to confirm that it is consistent with the **Declared Governor Droop** and **Declared Interconnector Frequency Droop**) and; (c) **Replacement Reserve** provided by each **Generation Unit, Interconnector** or **Demand Side Unit**.
OC.10.5.5	Addition of 'or control setpoints' in order to reference units controllable by the TSO. Removal of specific reference to 'Generation Units' so as to include all relevant users. Some corrections for grammar.	The **TSO** may, from time to time, carry out **Tests** in order to determine that a **User** is complying with its **Connection Conditions**, **Registered Operating Characteristics** and **Declarations**. The **TSO** may: (a) from time to time and for the purposes of **Testing**, issue a **Dispatch Instructions** or control setpoints; (b) induce controlled **Power System Frequency** or **Voltage** conditions or variations for the purpose of determining that the ~~**Generation Unit's**~~ **User's** response is in accordance with its **Declared Availability**, **Ancillary Service** capabilities, ~~and~~ **Operating Characteristics**; and (c) having given three **Business Days** notice, or less where agreed, (identifying the **Ancillary Service** and/or **Operating Characteristic** to be tested), send a representative to the ~~**Generator's**~~ **User's Site** to verify by **Testing** in accordance with the **Test** procedures specified in OC.10.5.8, that the ~~**Generator**~~ **User** is in compliance with its **Declared** values; […]	The **TSO** may, from time to time, carry out **Tests** in order to determine that a **User** is complying with its **Connection Conditions**, **Registered Operating Characteristics** and **Declarations**. The **TSO** may: (a) from time to time and for the purposes of **Testing**, issue a **Dispatch Instructions** or control setpoints; (b) induce controlled **Power System Frequency** or **Voltage** conditions or variations for the purpose of determining that the **User's** response is in accordance with its **Declared Availability**, **Ancillary Service** capabilities, **Operating Characteristics**; and (c) having given three **Business Days** notice, or less where agreed, (identifying the **Ancillary Service** and/or **Operating Characteristic** to be tested), send a representative to the **User's Site** to verify by **Testing** in accordance with the **Test** procedures specified in OC.10.5.8, that the **User** is in compliance with its **Declared** values; […]

OC.10.7.1.6	Inclusion of defined terms specific to DSUs to consistently incorporate the user type throughout this clause.	Where the **TSO**, acting reasonably, is of the view that a disputation given by a **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** is not valid or not wholly valid or if the **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** has not replied in accordance with OC.10.7.1.2, the **TSO** shall inform the **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** that it is overriding, by means of a **Post Event Notice**, the **Generator's Declaration** or **Interconnector's Declaration** in respect of the **Availability**, the **Demand Side Unit Operator's Declaration** in respect of **Demand Side Unit MW Availability**, **Ancillary Service** capabilities or **Operating Characteristics** of the **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit** as appropriate. The **Post Event Notice** shall govern until such times as the **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** or **Generator Aggregator** submits a revised **Availability Notice**.	Where the **TSO**, acting reasonably, is of the view that a disputation given by a **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** is not valid or not wholly valid or if the **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** has not replied in accordance with OC.10.7.1.2, the **TSO** shall inform the **Generator**, **Interconnector Operator, Demand Side Unit Operator** or **Generator Aggregator** that it is overriding, by means of a **Post Event Notice**, the **Generator's Declaration** or **Interconnector's Declaration** in respect of the **Availability**, the **Demand Side Unit Operator's Declaration** in respect of **Demand Side Unit MW Availability**, **Ancillary Service** capabilities or **Operating Characteristics** of the **Generation Unit**, **Interconnector** or **Demand Side Unit** as appropriate. The **Post Event Notice** shall govern until such times as the **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** or **Generator Aggregator** submits a revised **Availability Notice**.
OC.10.7.1.7	Inclusion of 'Demand Side Unit' to consistently incorporate the user type throughout this clause. Bolding and capitalising of 'Declared' as a defined term under the Grid Code. Some corrections for grammar.	Where the **TSO** gives a **Post Event Notice** under OC.10.7.1.6, the **Post Event Notice** shall be backdated to the time of issue of the relevant **Dispatch Instruction**, or the latest time for which there exists compelling evidence that the **Generation Unit, Interconnector** ~~and~~ or **Demand Side Unit** was acting in compliance with the **Dispatch Instruction**, whichever is the later. The **Post Event Notice** shall set the level of **Declared Availability**, **Declared Ancillary Service** capability or ~~declared~~ **Declared Technical Parameter**, as the case may be, at such level as the **Monitoring**, **Testing** or **Investigation** indicates the **Generation Unit, ~~or~~ Interconnector** or **Demand Side Unit** actually achieved. Notwithstanding the backdating of the **Post Event Notice**, the **User** will still be deemed under OC.10.7.1.1 as having failed to comply with a **Dispatch Instruction**.	Where the **TSO** gives a **Post Event Notice** under OC.10.7.1.6, the **Post Event Notice** shall be backdated to the time of issue of the relevant **Dispatch Instruction**, or the latest time for which there exists compelling evidence that the **Generation Unit, Interconnector** or **Demand Side Unit** was acting in compliance with the **Dispatch Instruction**, whichever is the later. The **Post Event Notice** shall set the level of **Declared Availability**, **Declared Ancillary Service** capability or **Declared Technical Parameter**, as the case may be, at such level as the **Monitoring**, **Testing** or **Investigation** indicates the **Generation Unit, Interconnector** or **Demand Side Unit** actually achieved. Notwithstanding the backdating of the **Post Event Notice**, the **User** will still be deemed under OC.10.7.1.1 as having failed to comply with a **Dispatch Instruction**.

OC.10.7.2	Inclusion of 'Demand Side Unit Operator' as a relevant user for reserve provision. Inclusion of 'Replacement Reserve' as distinct from 'Operating Reserve', as 'Replacement Reserve' is defined separately from 'Operating Reserve' under the Grid Code.	**Non-compliance by a Generator, ~~and~~ Interconnector Operator and Demand Side Unit Operator with Declared Operating Reserve and Replacement Reserve**	**Non-compliance by a Generator, Interconnector Operator and Demand Side Unit Operator with Declared Operating Reserve and Replacement Reserve**
OC.10.7.2.1	Inclusion of 'Demand Side Unit Operator' as a relevant user for reserve provision. Inclusion of FFR and RR as relevant reserve Ancillary Services. Inclusion of Interconnector specific defined term ' Interconnector Frequency Droop' as opposed to 'Governor Droop', which is specific to Generators under the Grid Code. Corrections for grammar.	In evaluating the adequacy of the performance of a **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit** as the case may be, the **TSO** shall compare the actual performance as measured, with the expected performance for that **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit**. The expected performance from the **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit** shall be calculated based on the **Frequency** deviation from the **Pre-Incident Frequency**, and the **Generation Unit's**, ~~or~~ **Interconnector's** or **Demand Side Unit's** then **Declared** values of **Availability, FFR, POR, SOR, TOR1, TOR2, RR, ~~and~~ Governor Droop** and **Interconnector Frequency Droop**.	In evaluating the adequacy of the performance of a **Generation Unit**, **Interconnector** or **Demand Side Unit** as the case may be, the **TSO** shall compare the actual performance as measured, with the expected performance for that **Generation Unit**, **Interconnector** or **Demand Side Unit**. The expected performance from the **Generation Unit**, **Interconnector** or **Demand Side Unit** shall be calculated based on the **Frequency** deviation from the **Pre-Incident Frequency**, and the **Generation Unit's**, **Interconnector's** or **Demand Side Unit's** then **Declared** values of **Availability, FFR, POR, SOR, TOR1, TOR2, RR, Governor Droop** and **Interconnector Frequency Droop**.
OC.10.7.2.2	Inclusion of 'Demand Side Unit' and 'Demand Side Unit Operator' as a relevant user for reserve provision. Inclusion of 'Replacement Reserve' as distinct from 'Operating Reserve' under the Grid Code. Corrections for grammar.	Where the performance of a **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit** is deemed by the **TSO** to be in non-compliance with **Declared Operating Reserve** or **Replacement Reserve**, then the **TSO** shall notify the **Generator**, ~~or~~ **Interconnector Operator**~~,~~ or **Demand Side Unit Operator** of the non-compliance, identifying the system or procedure by which non-compliance was measured. The **TSO** shall by means of a **Post Event Notice** override the **Generator's**, ~~or~~ **Interconnector Operator's** or **Demand Side Unit Operator's Declaration** in respect of **Operating Reserve** or **Replacement Reserve**. The revised **Declaration** shall be effective from the time of commencement of the **Test** or **Event** on which the non-compliance has been assessed, or such later time as may, in the	Where the performance of a **Generation Unit**, **Interconnector** or **Demand Side Unit** is deemed by the **TSO** to be in non-compliance with **Declared Operating Reserve** or **Replacement Reserve**, then the **TSO** shall notify the **Generator**, **Interconnector Operator**~~,~~ or **Demand Side Unit Operator** of the non-compliance, identifying the system or procedure by which non-compliance was measured. The **TSO** shall by means of a **Post Event Notice** override the **Generator's**, **Interconnector Operator's** or **Demand Side Unit Operator's Declaration** in respect of **Operating Reserve** or **Replacement Reserve**. The revised **Declaration** shall be effective from the time of commencement of the **Test** or **Event** on which the non-compliance has been assessed, or such later time as may, in the opinion of the **TSO** acting reasonably, be appropriate if the non-

		opinion of the **TSO** acting reasonably, be appropriate if the non-compliance did not apply to the full period of the **Test** or **Event**.	compliance did not apply to the full period of the **Test** or **Event**.
OC.10.7.2.3	Inclusion of 'Demand Side Unit' and 'Demand Side Unit Operator' as a relevant user for reserve provision. Bolding and capitalising 'System' as a defined term under the Grid Code.	Following the notification of non-compliance, the **TSO** shall make available to the **Generator**, ~~or~~ **Interconnector Operator** or **Demand Side Unit Operator** within three **Business Days** relevant data in relation to the ~~system~~ **System Frequency** and **Generation Unit**, ~~or~~ **Interconnector** or **Demand Side Unit** performance, that the **Generator**, ~~or~~ **Interconnector** or **Demand Side Unit Operator** may reasonably require substantiating the assessment of non-compliance.	Following the notification of non-compliance, the **TSO** shall make available to the **Generator**, **Interconnector Operator** or **Demand Side Unit Operator** within three **Business Days** relevant data in relation to the **System Frequency** and **Generation Unit**, **Interconnector** or **Demand Side Unit** performance, that the **Generator**, **Interconnector** or **Demand Side Unit Operator** may reasonably require substantiating the assessment of non-compliance.
OC.10.7.2.4	Inclusion of 'Demand Side Unit' and 'Demand Side Unit Operator' as a relevant user for reserve provision. Inclusion of 'Replacement Reserve' as distinct from 'Operating Reserve' under the Grid Code. Inclusion of newly proposed defined term 'System Services Code', which will, in addition to Grid Code and Trading and Settlement Code, include requirements for reserve performance monitoring and compliance.	The consequences of non-compliance by a **Generator**, ~~or~~ **Interconnector** or **Demand Side Unit** with **Declared Operating Reserve** or **Replacement Reserve** will be addressed in the **Trading and Settlement Code**, the **System Services Code** and other agreements as appropriate.	The consequences of non-compliance by a **Generator**, **Interconnector** or **Demand Side Unit** with **Declared Operating Reserve** or **Replacement Reserve** will be addressed in the **Trading and Settlement Code**, the **System Services Code** and other agreements as appropriate.
OC.11.3	Inclusion of '(e)' so Demand Side Unit Operators are referenced under (g). Included in this modification proposal as OC.11 Safety Coordination is applies to all users and provisions relevant to the Transmission System.	OC11 applies to the **TSO** and to the following **Users**: (a) **Generators**; (b) **Interconnector Operators**; (c) the **Distribution System Operator**; (d) **Demand Customers**; (e) **Demand Side Unit Operators**; (f) the **TAO**; and	OC11 applies to the **TSO** and to the following **Users**: (a) **Generators**; (b) **Interconnector Operators**; (c) the **Distribution System Operator**; (d) **Demand Customers**; (e) **Demand Side Unit Operators**; (f) the **TAO**; and

		(g) agents of ~~the~~ the **TSO** or agents of any **User** (as defined in **Error! Reference source not found.**(a),(b),(c) ,~~and~~ (d) and (e)).	(g) agents of the **TSO** or agents of any **User** (as defined in **Error! Reference source not found.**(a),(b),(c), (d) and (e)).
SDC1.1.1	Inclusion of newly proposed defined term 'System Services Code', and its acronym 'SSC' as a document SDC1 of the Grid Code is also intended to work in conjunction with, and as a document both the EirGrid and SONI Grid Codes will take precedence over. Bolding and capitalising 'Scheduling and Dispatch Code' as a defined term under the Grid Code, and bolding 'SDC' as the acronym of this defined term.	**SEM** Provisions (a) This ~~Scheduling and Dispatch Code~~ **Scheduling and Dispatch Code** No. 1 ("~~SDC~~**SDC**1") forms part of the **Sections under Common Governance** of the **Grid Code**. The **Sections under Common Governance** are those parts of the **Grid Code** which are under common governance in both the **Grid Code** and the **Other Grid Code**. (b) The form of this ~~SDC~~**SDC**1 is similar to the ~~SDC~~**SDC**1 in the **Other Grid Code.** Differences relate to references to relevant power systems and related terms. Where there is a difference between a provision in this **Grid Code** and an equivalent provision in the **Other Grid Code**, the wording in question is shaded in grey. In addition, those parts of this ~~SDC~~**SDC**1 that are not part of the **Other Grid Code** are shaded in grey in this ~~SDC~~**SDC**1. Differences between the form of this ~~SDC~~**SDC**1 and the ~~SDC~~**SDC**1 in the **Other Grid Code** are summarised in Annex 1 to this ~~SDC~~**SDC**1. (c) This ~~SDC~~**SDC**1 is intended to work in conjunction with other documents, including the **Trading and Settlement Code** ("**TSC**") and the **System Services Code** ("**SSC**"). The provisions of the **Grid Code** and the **Other Grid Code** will take precedence over the **TSC** and the **SSC**. (d) Where stated in ~~SDC~~**SDC**1 the obligation to submit data in relation to some of the information required to be provided to the **TSO** may be fulfilled by **Users** where such information submitted under the **TSC** by a **User** or by an **Intermediary** on behalf of **Users** is then provided to the **TSO** by the **Market Operator** in accordance with the **TSC**, as further provided in this ~~SDC~~**SDC**1. The **TSO** may require	**SEM** Provisions (a) This **Scheduling and Dispatch Code** No. 1 ("**SDC**1") forms part of the **Sections under Common Governance** of the **Grid Code**. The **Sections under Common Governance** are those parts of the **Grid Code** which are under common governance in both the **Grid Code** and the **Other Grid Code**. (b) The form of this **SDC**1 is similar to the **SDC**1 in the **Other Grid Code.** Differences relate to references to relevant power systems and related terms. Where there is a difference between a provision in this **Grid Code** and an equivalent provision in the **Other Grid Code**, the wording in question is shaded in grey. In addition, those parts of this **SDC**1 that are not part of the **Other Grid Code** are shaded in grey in this **SDC**1. Differences between the form of this **SDC**1 and the **SDC**1 in the **Other Grid Code** are summarised in Annex 1 to this **SDC**1. (c) This **SDC**1 is intended to work in conjunction with other documents, including the **Trading and Settlement Code** ("**TSC**") and the **System Services Code** ("**SSC**"). The provisions of the **Grid Code** and the **Other Grid Code** will take precedence over the **TSC** and the **SSC**. (d) Where stated in **SDC**1 the obligation to submit data in relation to some of the information required to be provided to the **TSO** may be fulfilled by **Users** where such information submitted under the **TSC** by a **User** or by an **Intermediary** on behalf of **Users** is then provided to the **TSO** by the **Market Operator** in accordance with the **TSC**, as further provided in this **SDC**1. The **TSO** may require **Users**

		Users to verify or provide revisions to data received by it via the **Market Operator**. (e) Further provisions dealing with the **Sections under Common Governance** are contained in the **General Conditions**.	to verify or provide revisions to data received by it via the **Market Operator**. (e) Further provisions dealing with the **Sections under Common Governance** are contained in the **General Conditions**.
SDC1.1.2	Inclusion of 'Interconnectors' as relevant user type. Bolding of 'SDC' as a defined term acronym.	~~SDC~~**SDC**1 sets out the procedure used by the **TSO** to develop unit commitment schedules in respect of **CDGU's**, **Interconnectors**, **Controllable PPMs** and **Demand Side Units** including the requirements for **Users** to submit data to support this procedure: […]	**SDC**1 sets out the procedure used by the **TSO** to develop unit commitment schedules in respect of **CDGU's**, **Interconnectors**, **Controllable PPMs** and **Demand Side Units** including the requirements for **Users** to submit data to support this procedure: […]
SDC1.4.3.1	Propose modifying this clause so it references all relevant users and not just Generators, and removes the need for repetitive clauses later on in this section.	~~Availability of Generating Units~~ Each **Generator**,~~ and~~ **Generator Aggregator**, **Interconnector Operator** and **Demand Side Unit Operator** shall, in relation to its **CDGUs**, **Controllable PPMs**, ~~or~~ **Aggregated Generating Units**, **Interconnectors** or **Demand Side Units**, maintain, repair, operate and fuel the **CDGU** and/or **Controllable PPM** and/or **Aggregated Generating Unit** and/or **Interconnector** and/or **Demand Side Unit** as required by ***Prudent Utility Practice*** and any legal requirements applicable to its jurisdiction, with a view to providing the required ***Ancillary Services*** *as provided for in an* ***Ancillary Services Agreement***.	Each **Generator**, **Generator Aggregator**, **Interconnector Operator** and **Demand Side Unit Operator** shall, in relation to its **CDGUs**, **Controllable PPMs**, **Aggregated Generating Units**, **Interconnectors** or **Demand Side Units**, maintain, repair, operate and fuel the **CDGU** and/or **Controllable PPM** and/or **Aggregated Generating Unit** and/or **Interconnector** and/or **Demand Side Unit** as required by ***Prudent Utility Practice*** and any legal requirements applicable to its jurisdiction, with a view to providing the required ***Ancillary Services*** *as provided for in an* ***Ancillary Services Agreement***.
SDC1.4.3.2	Inclusion of other relevant user types and related terms. Bolding and capitalising 'Declaration' as a defined term under the Grid Code.	Each **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** and, where relevant, each **Generator Aggregator**, shall, subject to the exceptions in SDC1.4.3.3 and SDC1.4.3.3A, use reasonable endeavours to ensure that it does not at any time declare in the case of its **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit** or **Aggregated Generating Unit**, the **Availability**, **Demand Side Unit MW Availability** or **Technical Parameters** at levels or values different from those that the **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit** and/or an **Aggregated Generating Unit** could achieve at the	Each **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** and, where relevant, each **Generator Aggregator**, shall, subject to the exceptions in SDC1.4.3.3 and SDC1.4.3.3A, use reasonable endeavours to ensure that it does not at any time declare in the case of its **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit** or **Aggregated Generating Unit**, the **Availability**, **Demand Side Unit MW Availability** or **Technical Parameters** at levels or values different from those that the **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit** and/or an **Aggregated Generating Unit** could achieve at the

		relevant time. The **TSO** can reject ~~declarations~~ **Declarations** to the extent that they do not meet these requirements.	relevant time. The **TSO** can reject **Declarations** to the extent that they do not meet these requirements.
SDC1.4.3.3	Inclusion of other relevant user types and related terms.	SDC1.4.3.2 shall not apply to the extent: (a) it would require the **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** or, where relevant, the **Generator Aggregator** to declare levels or values better than the **Registered Capacity**, **Demand Side Unit MW Capacity** and **Technical Parameters** as submitted under the **Planning Code** in respect of a **CDGU**, a **Controllable PPM**, an **Interconnector**, a **Demand Side Unit** and/or an **Aggregated Generating Unit**; (b) necessary during periods of ***Scheduled Outage*** or ***Short Term Scheduled Outage*** or otherwise with the consent of the **TSO**; (c) necessary while repairing or maintaining the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit** or equipment necessary to the operation of the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit** where such repair or maintenance cannot reasonably, in accordance with ***Prudent Utility Practice***, be deferred to a period of ***Scheduled Outage*** or ***Short Term Scheduled Outage***; (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit**); or (e) it is not lawful for the **Generator**, **Interconnector Operator** or **Demand Side Unit Operator** to operate	SDC1.4.3.2 shall not apply to the extent: (a) it would require the **Generator**, **Interconnector Operator**, **Demand Side Unit Operator** or, where relevant, the **Generator Aggregator** to declare levels or values better than the **Registered Capacity**, **Demand Side Unit MW Capacity** and **Technical Parameters** as submitted under the **Planning Code** in respect of a **CDGU**, a **Controllable PPM**, an **Interconnector**, a **Demand Side Unit** and/or an **Aggregated Generating Unit**; (b) necessary during periods of ***Scheduled Outage*** or ***Short Term Scheduled Outage*** or otherwise with the consent of the **TSO**; (c) necessary while repairing or maintaining the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit** or equipment necessary to the operation of the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit** where such repair or maintenance cannot reasonably, in accordance with ***Prudent Utility Practice***, be deferred to a period of ***Scheduled Outage*** or ***Short Term Scheduled Outage***; (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Unit**); or (e) it is not lawful for the **Generator**, **Interconnector Operator** or **Demand Side Unit Operator** to operate

		the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Units**, or for the **Demand Side Unit Operator** to change its **Demand Side Unit MW Response**.	the **CDGU**, the **Controllable PPM**, the **Interconnector**, the **Demand Side Unit** and/or the **Aggregated Generating Units**, or for the **Demand Side Unit Operator** to change its **Demand Side Unit MW Response**.
SDC1.4.3.3A	Inclusion of other relevant user types.	SDC1.4.3.2 shall not apply for a **CDGU**, a **Controllable PPM**, an **Interconnector**, a **Demand Side Unit**, an **Aggregated Generating Unit** or **Pumped Storage Plant Demand** that is disconnected during the any one or more of the following: (a) Any **TSO** scheduled **Annual Maintenance Outage** or portion thereof on the **Outturn Availability Connection Asset** lasting up to and including a maximum of five days in total in a calendar year; or (b) Where work to the **Transmission System** is being carried out that is driven by the relevant **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand** or driven by works related to the **Connection Agreement** of the relevant **CDGU**, **Controllable PPM, Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand.** This does not include work carried out related to another ~~**Generation Unit**~~ **CDGU**, **Controllable PPM, Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand** with a different **Connection Point** but a shared asset. The relevant **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Plant Demand** shall declare **Availability** at a value of zero during any one or more of (a) or (b) above, as advised by the **TSO.**	SDC1.4.3.2 shall not apply for a **CDGU**, a **Controllable PPM**, an **Interconnector**, a **Demand Side Unit**, an **Aggregated Generating Unit** or **Pumped Storage Plant Demand** that is disconnected during the any one or more of the following: (a) Any **TSO** scheduled **Annual Maintenance Outage** or portion thereof on the **Outturn Availability Connection Asset** lasting up to and including a maximum of five days in total in a calendar year; or (b) Where work to the **Transmission System** is being carried out that is driven by the relevant **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand** or driven by works related to the **Connection Agreement** of the relevant **CDGU**, **Controllable PPM, Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand.** This does not include work carried out related to another **CDGU**, **Controllable PPM, Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Storage Plant Demand** with a different **Connection Point** but a shared asset. The relevant **CDGU**, **Controllable PPM**, **Interconnector**, **Demand Side Unit**, **Aggregated Generating Unit** or **Pumped Plant Demand** shall declare **Availability** at a value of zero during any one or more of (a) or (b) above, as advised by the **TSO.**
~~**SDC1.4.3.4**~~	Propose incorporating this DSU requirement into clause SDC1.4.3.1 to avoid unnecessary repetition.	~~Availability of Demand Side Units~~	

		~~Each **Demand Side Unit Operator** shall, subject to the exceptions in 0 and SDC1.4.3.5A, use reasonable endeavours to ensure that it does not at any time declare the **Demand Side Unit MW Availability** and the **Demand Side Unit** characteristics of its **Demand Side Unit** at levels or values different from those that the **Demand Side Unit** could achieve at the relevant time. The **TSO** can reject declarations to the extent that they do not meet these requirements.~~	
~~**SDC1.4.3.5**~~	Propose incorporating this DSU requirement into clause SDC1.4.3.3 to avoid unnecessary repetition.	~~0 shall not apply to the extent:~~ ~~(a) it would require the **Demand Side Unit Operator** to declare levels or values better than **Demand Side Unit MW Capacity** and **Technical Parameters** as submitted under the **Planning Code** in respect of a **Demand Side Unit**;~~ ~~(b) necessary during periods of ***Scheduled Outage*** or ***Short Term Scheduled Outage*** or otherwise with the consent of the **TSO**;~~ ~~(c) necessary while repairing or maintaining the **Demand Side Unit** or equipment necessary to the operation of the **Demand Side Unit** where such repair or maintenance cannot reasonably, in accordance with ***Prudent Utility Practice***, be deferred to a period of ***Scheduled Outage*** or ***Short Term Scheduled Outage***.~~ ~~(d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the **Demand Side Unit**);~~ ~~(e) it is not lawful for the **Demand Side Unit Operator** to change its **Demand Side Unit MW Response** or to operate its **Demand Side Unit**.~~	
~~**SDC1.4.3.5A**~~	Propose incorporating this DSU requirement into clause SDC1.4.3.3A to avoid unnecessary repetition.	~~SDC1.4.3.4 shall not apply for a **Demand Side Unit** that is disconnected during any one or more of the following:~~	

		~~(a) Any **TSO** scheduled **Annual Maintenance Outage** or portion thereof on the **Outturn Availability Connection Asset** lasting up to and including a maximum of five days in total in a calendar year; or~~ ~~(b) Where work to the **Transmission System** is being carried out that is driven by the relevant **Demand Side Unit** or driven by works related to **Connection Agreement** of the relevant **Demand Side Unit**. This does not include work carried out to another **Generating Unit** with a different **Connection Point** but a shared asset.~~ ~~The relevant **Demand Side Unit** shall declare **Availability** at a value of zero during any one or more of (a) or (b) above, as advised by the **TSO**.~~	
SDC1.4.4.2	Replacing 'Generator' with 'User' as the Additional Grid Code Characteristics Notice is relevant to all users capable of providing reserve.	**Additional Grid Code Characteristics Notice** The following items are required to be submitted by each **User** direct to the **TSO**: […] (h) *A ~~**Generator**~~ **User** shall submit to the **TSO** the **Operating Reserve** capabilities for each relevant category of **Operating Reserve** and **Replacement Reserve** ~~defined~~ listed in OC4.6.3 for each of its ~~**CDGUs**~~ **units** for each **Imbalance Settlement Period**.*	**Additional Grid Code Characteristics Notice** The following items are required to be submitted by each **User** direct to the **TSO**: […] *(h) A **User** shall submit to the **TSO** the **Operating Reserve** capabilities for each relevant category of **Operating Reserve** and **Replacement Reserve** listed in OC4.6.3 for each of its **units** for each **Imbalance Settlement Period**.*
SDC1.4.4.6 (f)	Addition of 'Side' to correct for full defined term 'Demand Side Unit MW Response'.	[…] (f) If a **User** has submitted proposals for a test to the **TSO** and subsequently receives approval for the test from the **TSO**, the **User** (or their **Intermediary**, if applicable) shall submit **Physical Notifications** for the unit under test in accordance with the **TSC** to identify the time periods during which their units are under test. The **User** shall ensure that the **Physical Notifications** submitted in respect of a unit under test align with the approved test start time, test **MW Output** profile (or	[…] (f) If a **User** has submitted proposals for a test to the **TSO** and subsequently receives approval for the test from the **TSO**, the **User** (or their **Intermediary**, if applicable) shall submit **Physical Notifications** for the unit under test in accordance with the **TSC** to identify the time periods during which their units are under test. The **User** shall ensure that the **Physical Notifications** submitted in respect of a unit under test align with the approved test start time, test **MW Output** profile (or **Demand Side Unit MW Response** profile in the case of

		Demand Side Unit MW Response profile in the case of **Demand Side Units**) and test end time.	**Demand Side Units**) and test end time.
SDC1.4.6 b)	Addition of 'Interconnector' as relevant user type for submission of notices to the TSO, e.g. SDC1.4.2.2. Replacement of 'himself' with 'themselves'.	Form of Submission […] b) The individual who is giving the notice by telephone on behalf of the **User** shall firstly specify the time at which the notice is being given, then identify himself and ask the individual receiving the notice on behalf of the **TSO** also to identify ~~himself~~ themselves. The information required by the notice shall then be given, including (without limitation) the identity of the **CDGU**, **Controllable PPM**, **Interconnector**, **Aggregated Generating Unit**, **Pumped Storage Plant** and **Demand Side Unit** to which the notice relates. […]	Form of Submission […] b) The individual who is giving the notice by telephone on behalf of the **User** shall firstly specify the time at which the notice is being given, then identify himself and ask the individual receiving the notice on behalf of the **TSO** also to identify themselves. The information required by the notice shall then be given, including (without limitation) the identity of the **CDGU**, **Controllable PPM**, **Interconnector**, **Aggregated Generating Unit**, **Pumped Storage Plant** and **Demand Side Unit** to which the notice relates. […]
SDC1.4.7.1	Addition of 'Active Power transfer or Demand' for inclusion of Interconnectors and Demand Side Units as relevant users.	**Indicative Operations Schedules** will be compiled by the **TSO** in conjunction with the **Other TSO** as further provided in this SDC1.4.7 **Error! Reference source not found.**as a statement of which **CDGUs** and/or **Controllable PPM** and/or transfers across any **Interconnector** and/or **Demand Side Units** and/or **Pumped Storage Plant Demand** and/or **Aggregated Generating Units** and equivalent units in *Northern Ireland* may be required to operate and their expected **MW Output**, **Active Power** transfer or **Demand**. The **TSO** in conjunction with the **Other TSO** will periodically update the **Indicative Operations Schedules**.	**Indicative Operations Schedules** will be compiled by the **TSO** in conjunction with the **Other TSO** as further provided in this SDC1.4.7 as a statement of which **CDGUs** and/or **Controllable PPM** and/or transfers across any **Interconnector** and/or **Demand Side Units** and/or **Pumped Storage Plant Demand** and/or **Aggregated Generating Units** and equivalent units in *Northern Ireland* may be required to operate and their expected **MW Output**, **Active Power** transfer or **Demand**. The **TSO** in conjunction with the **Other TSO** will periodically update the **Indicative Operations Schedules**.
SDC1.4.7.2	Addition of 'or control' in order to reference units controllable by the TSO. Addition of 'or Active Power transfer', 'or for reducing Demand below' and 'or for increasing Demand above' for inclusion of Interconnectors and Demand Side Units as relevant users to whom 'MW Output' as a defined	**Merit Order** Subject as provided below, a **Merit Order** will be compiled by the **TSO** (in conjunction with the **Other TSO**) for each **Imbalance Settlement Period** from the **Price Quantity Pairs**, **Start-Up Cost**, **Shutdown Cost** and **No-Load Cost** (which together shall be known as the "**Price Set**") and, subject as provided in this ~~SDC~~**SDC**1, used to determine which of the **CDGUs, Controllable**	**Merit Order** Subject as provided below, a **Merit Order** will be compiled by the **TSO** (in conjunction with the **Other TSO**) for each **Imbalance Settlement Period** from the **Price Quantity Pairs**, **Start-Up Cost**, **Shutdown Cost** and **No-Load Cost** (which together shall be known as the "**Price Set**") and, subject as provided in this **SDC**1, used to determine which of the **CDGUs, Controllable PPMs**,

	term under the Grid Code does not apply.	**PPMs**, **Pumped Storage Plant Demand**, **Demand Side Units**, **Aggregated Generating Units** or **Interconnector** power transfer to **Schedule** and **Dispatch** or control in relation to their **Price Sets** at values that differ from those indicated by **Physical Notifications,** as required to deliver the objectives set out in SDC1.2(a), SDC1.2(b) and SDC1.2(c). The **Merit Order** for increasing **MW Output** or **Active Power** transfer above, or for reducing **Demand** below, the level indicated in **Physical Notifications** and **Interconnector Schedule Quantities** will be on the basis of ascending prices so that the **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit,** or **Aggregated Generating Unit Price Set** or bid-offer data from **an External System Operator** at the head of a **Merit Order** will be that which has the lowest price per MWh, and that at the foot of a **Merit Order** shall be the one with the highest price per MWh. Each **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit**, **Aggregated Generating Units** and**/**or bid-offer data from **an External System Operator** shall appear in the **Merit Order** for each **Price Set** submitted. The **Merit Order** for ~~dispatching~~ decreasing **MW Output** or **Active Power** transfer below, or for increasing **Demand** above, ~~to~~ a level ~~below that~~ indicated in **Physical Notifications** and **Interconnector Schedule Quantities** will be on the basis of descending prices so that the **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit, Aggregated Generating Unit Price Set** or bid-offer data from an **External System Operator** at the head of a **Merit Order** will be that which has the highest price per MWh, and that at the foot of a **Merit Order** shall be the one with the lowest price per MWh. Each **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit**, **Aggregated Generating Units** or bid-offer data from an **External System Operator** shall appear in the **Merit Order** for each **Price Set** submitted.	**Pumped Storage Plant Demand**, **Demand Side Units**, **Aggregated Generating Units** or **Interconnector** power transfer to **Schedule** and **Dispatch** or control in relation to their **Price Sets** at values that differ from those indicated by **Physical Notifications,** as required to deliver the objectives set out in SDC1.2(a), SDC1.2(b) and SDC1.2(c). The **Merit Order** for increasing **MW Output** or **Active Power** transfer above, or for reducing **Demand** below, the level indicated in **Physical Notifications** and **Interconnector Schedule Quantities** will be on the basis of ascending prices so that the **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit,** or **Aggregated Generating Unit Price Set** or bid-offer data from **an External System Operator** at the head of a **Merit Order** will be that which has the lowest price per MWh, and that at the foot of a **Merit Order** shall be the one with the highest price per MWh. Each **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit**, **Aggregated Generating Units** and**/**or bid-offer data from **an External System Operator** shall appear in the **Merit Order** for each **Price Set** submitted. The **Merit Order** for decreasing **MW Output** or **Active Power** transfer below, or for increasing **Demand** above, a level indicated in **Physical Notifications** and **Interconnector Schedule Quantities** will be on the basis of descending prices so that the **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit, Aggregated Generating Unit Price Set** or bid-offer data from an **External System Operator** at the head of a **Merit Order** will be that which has the highest price per MWh, and that at the foot of a **Merit Order** shall be the one with the lowest price per MWh. Each **CDGU, Controllable PPM**, **Pumped Storage Plant Demand**, **Demand Side Unit**, **Aggregated Generating Units** or bid-offer data from an **External System Operator** shall appear in the **Merit Order** for each **Price Set** submitted.

SDC1.4.7.3	Addition of other user types relevant to compiling the Indicative Operations Schedule and provision of reserve.	In compiling the **Indicative Operations Schedules** in conjunction with the **Other TSO**, the **TSO** will take account of the following factors (and the equivalent factors on the **Other Transmission System** will be so treated separately by the **Other TSO**): […] (xvi) the inability of any **CDGU**, ~~and/or~~ **Controllable PPM**, **Interconnector** or **Demand Side Unit** to meet its full reserve capability; […]	In compiling the **Indicative Operations Schedules** in conjunction with the **Other TSO**, the **TSO** will take account of the following factors (and the equivalent factors on the **Other Transmission System** will be so treated separately by the **Other TSO**): […] (xvi) the inability of any **CDGU**, **Controllable PPM**, **Interconnector** or **Demand Side Unit** to meet its full reserve capability; […]
SDC1.4.7.7 a)	Addition of Controllable PPMs and 'or control setpoints', 'or controlled' and 'or control setpoint' in order to fully reference units controllable by the TSO and who are also relevant to compiling the Indicative Operations Schedule and provision of reserve. Removal of reference to ESPSs where relevant, as they are covered under references to CDGUs/Generators, Generating Units/Controllable PPMs. Addition of Demand Side Unit as a user relevant to compiling the Indicative Operations Schedule and provision of reserve. Unbolding and uncapitalising 'scheduled', which is not a defined term under the Grid Code.	The **Synchronising** and **De-Synchronising** times (and, in the case of **Pumped Storage Plant Demand** and ~~**Energy Storage Power Station**~~ the relevant effective time) shown in the **Indicative Operations Schedule** are indicative only and it should be borne in mind by **Users** that the **Dispatch Instructions** or control setpoints could reflect more or different **CDGU**, **Aggregated Generating Unit** and/or **Controllable PPM, Pumped Storage Plant Demand**, ~~**Energy Storage Power Station,**~~ **Demand Side Unit** and/or **Aggregate Generating Unit** requirements than in the **Indicative Operations Schedule**. With the exception of an **Energy Storage Power Station** the **TSO** may issue **Dispatch Instructions** or control setpoints in respect of any **CDGU** and/or **Aggregated Generating Unit**, **Controllable PPM, Pumped Storage Plant Demand** or **Aggregated Generating Unit** which has not declared an **Availability** or **Demand Side Unit MW Availability** of 0 MW in an **Availability Notice**. **Users** with **CDGUs** and/or **Aggregated Generating Units**, **Controllable PPM** or **Pumped Storage Plant Demand** ~~or **Energy Storage Power Station**~~ or **Demand Side Units** shall ensure that their units are able to be **Synchronised**, or in the case of **Pumped Storage Plant Demand** and ~~**Energy Storage Power Station,**~~ **Controllable PPMs,** used at the times ~~**Scheduled**~~ scheduled, but only if so **Dispatched** or controlled by the **TSO** by issue of a **Dispatch Instruction** or control setpoint. **Users** shall, as part of a revision to the **Technical Parameters**, indicate to the **TSO** the latest time at which a **Dispatch Instruction** or control setpoint is required to	The **Synchronising** and **De-Synchronising** times (and, in the case of **Pumped Storage Plant Demand** and **Controllable PPMs,** the relevant effective time) shown in the **Indicative Operations Schedule** are indicative only and it should be borne in mind by **Users** that the **Dispatch Instructions** or control setpoints could reflect more or different **CDGU**, **Aggregated Generating Unit** and/or **Controllable PPM, Pumped Storage Plant Demand**, **Energy Storage Power Station**, **Demand Side Unit** and/or **Aggregate Generating Unit** requirements than in the **Indicative Operations Schedule**. With the exception of an **Energy Storage Power Station** the **TSO** may issue **Dispatch Instructions** or control setpoints in respect of any **CDGU** and/or **Aggregated Generating Unit**, **Controllable PPM, Pumped Storage Plant Demand** or **Aggregated Generating Unit** which has not declared an **Availability** or **Demand Side Unit MW Availability** of 0 MW in an **Availability Notice**. **Users** with **CDGUs** and/or **Aggregated Generating Units**, **Controllable PPM** or **Pumped Storage Plant Demand** or **Demand Side Units** shall ensure that their units are able to be **Synchronised**, or in the case of **Pumped Storage Plant Demand** and **Controllable PPMs,** used at the times scheduled, but only if so **Dispatched** or controlled by the **TSO** by issue of a **Dispatch Instruction** or control setpoint. **Users** shall, as part of a revision to the **Technical Parameters**, indicate to the **TSO** the latest time at which a **Dispatch Instruction** or control setpoint is required to meet the scheduled **Synchronising** time or in the case of **Pumped Storage Plant Demand** or **Controllable PPM**,

		meet the scheduled **Synchronising** time or in the case of **Pumped Storage Plant Demand** or ~~**Energy Storage Power Station**~~ **Controllable PPM**, the ~~**Scheduled**~~ scheduled relevant effective time.	the scheduled relevant effective time.
SDC1.4.7.9	Addition of 'or control setpoints' and 'or control setpoint' in order to reference units controllable by the TSO and who are also relevant to compiling the Indicative Operations Schedule and provision of reserve. Replacing 'Synchronous Start-Up Time' with 'start-up time' as 'Synchronous Start-Up Time' is specific to Generation Units under the Grid Code. Bolding and capitalising the full term 'Dispatch Instruction' as a defined term under the Grid Code.	[…] (c) The **TSO** may issue **Dispatch Instructions** or control setpoints to **Users** in respect of **CDGUs, Controllable PPMs, Pumped Storage Plant Demand** and/or **Demand Side Units** and/or **Aggregated Generating Units** and/or **Interconnector** power transfers before the issue of the initial **Indicative Operations Schedule** for the **Trading Day** to which the **Dispatch** ~~Instruction~~ **Instruction** or control setpoint relates if the ~~**Synchronous Start-Up Time**~~ start-up time for the relevant **CDGUs** and/or **Controllable PPMs, Pumped Storage Plant Demand** and/or **Demand Side Unit** and/or **Aggregated Generating Unit** and/or **Interconnector** requires the **Dispatch Instruction** or control setpoint to be given at that time. When the length of the time required for **Notice to Synchronise** is within 30 minutes of causing the **CDGU** and/or **Controllable PPMs** and/or **Pumped Storage Plant Demand** to be unable to meet the indicative **Synchronising** time in the **Indicative Operations Schedule** or a subsequent indicative **Synchronising** time and no **Dispatch Instruction** or control setpoint has been received, the **Generator** shall inform the **TSO** without delay.	[…] (c) The **TSO** may issue **Dispatch Instructions** or control setpoints to **Users** in respect of **CDGUs, Controllable PPMs, Pumped Storage Plant Demand** and/or **Demand Side Units** and/or **Aggregated Generating Units** and/or **Interconnector** power transfers before the issue of the initial **Indicative Operations Schedule** for the **Trading Day** to which the **Dispatch Instruction** or control setpoint relates if the start-up time for the relevant **CDGUs** and/or **Controllable PPMs, Pumped Storage Plant Demand** and/or **Demand Side Unit** and/or **Aggregated Generating Unit** and/or **Interconnector** requires the **Dispatch Instruction** or control setpoint to be given at that time. When the length of the time required for **Notice to Synchronise** is within 30 minutes of causing the **CDGU** and/or **Controllable PPMs** and/or **Pumped Storage Plant Demand** to be unable to meet the indicative **Synchronising** time in the **Indicative Operations Schedule** or a subsequent indicative **Synchronising** time and no **Dispatch Instruction** or control setpoint has been received, the **Generator** shall inform the **TSO** without delay.
SDC1.4.7.10	Addition of 'connected' to refer to non-synchronously connected users PPMs. Unbolding and uncapitalising 'scheduled', which is not a defined term under the Grid Code.	<u>Regulation</u> It is a requirement for running the **Transmission System** that all **Synchronised CDGUs** and/or connected **Controllable PPMs** shall at all times be capable of reducing **MW Output** sufficient to allow a sufficient **Regulating Margin** for adequate **Frequency Control**. The **TSO** will monitor the **MW Output** data of the **Indicative Operations Schedule** against forecast of **System Demand** on the Island of Ireland to see whether the level of	<u>Regulation</u> It is a requirement for running the **Transmission System** that all **Synchronised CDGUs** and/or connected **Controllable PPMs** shall at all times be capable of reducing **MW Output** sufficient to allow a sufficient **Regulating Margin** for adequate **Frequency Control**. The **TSO** will monitor the **MW Output** data of the **Indicative Operations Schedule** against forecast of **System Demand** on the Island of Ireland to see whether the level of

	Addition of 'and control' in order to reference units controllable by the TSO.	regulation for any period is sufficient, and may take any shortfall into account in ~~**Scheduling**~~ scheduling, **Dispatch** and control.	regulation for any period is sufficient, and may take any shortfall into account in scheduling, **Dispatch** or control.
SDC1 Appendix A Part 2. Additional data items required in an Additional Grid Code Characteristics Notice	Include reference to Interconnectors and Demand Side Units for reserve declarations under the Additional Grid Code Characteristics Notice, and include Interconnector Frequency Droop as a variable to be declared by Interconnectors.	Table (i) **Declared POR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared SOR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared TOR1** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared TOR2** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared Replacement Reserve** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for POR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for SOR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for TOR1** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for TOR2** *CDGUs, Interconnectors and Demand Side Units (excluding*	Table (i) **Declared POR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared SOR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared TOR1** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared TOR2** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Declared Replacement Reserve** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for POR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for SOR** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for TOR1** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Minimum MW for TOR2** *CDGUs, Interconnectors and Demand Side Units (excluding*

		Dispatchable PPMs) **Minimum MW for Replacement Reserve** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **POR Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **SOR Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **TOR1 Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **TOR2 Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Replacement Reserve Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Replacement Reserve Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* […] **Interconnector Frequency Droop** *Interconnectors*	*Dispatchable PPMs)* **Minimum MW for Replacement Reserve** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **POR Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **SOR Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **TOR1 Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **TOR2 Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Replacement Reserve Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* **Replacement Reserve Decrement Rate** *CDGUs, Interconnectors and Demand Side Units (excluding Dispatchable PPMs)* […] **Interconnector Frequency Droop** *Interconnectors*
SDC2.1.1 (c)	Inclusion of newly proposed defined term 'System Services Code', and its acronym 'SSC' as a document SDC2 of the Grid Code is also intended to work in conjunction with, and as a document both the EirGrid and SONI	[…] (c) This ~~SDC~~**SDC**2 is intended to work in conjunction with other documents, including the **Trading and Settlement Code ("TSC")** and the **System Services Code** ("**SSC**"). The	(c) This **SDC**2 is intended to work in conjunction with other documents, including the **Trading and Settlement Code ("TSC")** and the **System Services Code** ("**SSC**"). The provisions of the **Grid Code** and the **Other Grid Code** will

	Grid Codes will take precedence over. Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'.	provisions of the **Grid Code** and the **Other Grid Code** will take precedence over the **TSC** and the **SSC**. […]	take precedence over the **TSC** and the **SSC**.
SDC2.1.2	Addition of text to reference Interconnectors that are controllable by the TSO, pending a future, separate modification incorporating controllable units into the SDCs more clearly, ubiquitously and distinct from dispatchable units where relevant. Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'.	~~SDC~~**SDC**2 sets out the procedure for the **TSO** to issue **Dispatch Instructions** to: (a) **Generators** in respect of their **CDGUs** (which for the avoidance of doubt comprise, **Generating Units** subject to **Central Dispatch**, **CCGT Installations**, **Hydro Units**, **Pumped Storage Generation** and **Dispatchable PPMs**); (b) **Pumped Storage Generators** in respect of their **Pumped Storage Plant Demand**; (c) **Interconnector Owners** in respect of their **Interconnectors**; (d) **Demand Side Unit Operators** in respect of their **Demand Side Units**; and (e) **Generator Aggregators** in respect of their **Aggregated Generating Units**. **Controllable PPMs** are not currently subject to **Dispatch Instructions.** However, remote signals sent by the **TSO** to **Controllable PPMs** in order to limit **Active Power Output** may be utilised by the **MO** as **Dispatch Instructions** in accordance with the **TSC**. For **Interconnectors** subject to control by the **TSO** and, as such, are sent remote signals by the **TSO** to control **Active Power** transfers over said **Interconnectors**, reference to **Dispatch Instructions** in this **Grid Code** can be considered a reference to these remote signals, where relevant.	**SDC**2 sets out the procedure for the **TSO** to issue **Dispatch Instructions** to: (a) **Generators** in respect of their **CDGUs** (which for the avoidance of doubt comprise, **Generating Units** subject to **Central Dispatch**, **CCGT Installations**, **Hydro Units**, **Pumped Storage Generation** and **Dispatchable PPMs**); (b) **Pumped Storage Generators** in respect of their **Pumped Storage Plant Demand**; (c) **Interconnector Owners** in respect of their **Interconnectors**; (d) **Demand Side Unit Operators** in respect of their **Demand Side Units**; and (e) **Generator Aggregators** in respect of their **Aggregated Generating Units**. **Controllable PPMs** are not currently subject to **Dispatch Instructions.** However, remote signals sent by the **TSO** to **Controllable PPMs** in order to limit **Active Power Output** may be utilised by the **MO** as **Dispatch Instructions** in accordance with the **TSC**. For **Interconnectors** subject to control by the **TSO** and, as such, are sent remote signals by the **TSO** to control **Active Power** transfers over said **Interconnectors**, reference to **Dispatch Instructions** in this **Grid Code** can be considered a reference to these remote signals, where relevant.
SDC2.2	Inclusion of 'Interconnector Schedule Quantities' as a defined term specific to Interconnectors that is equivalent	The procedure for the issue of **Dispatch Instructions** or control setpoints by the **TSO**, is intended to enable (as far as possible) the **TSO** to match continuously **CDGU**, **Demand Side Unit**,	The procedure for the issue of **Dispatch Instructions** or control setpoints by the **TSO**, is intended to enable (as far as possible) the **TSO** to match continuously **CDGU**, **Demand Side Unit**,

	to Physical Notifications from other user types. Addition of appropriate defined term 'Other Transmission System' to refer to the NI Transmission System. Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'.	**Aggregated Generating Units** output (or reduction as the case may be) and/or **Interconnector** transfers to **Demand**, and thereby in conjunction with the **Other TSO**, the demand on the Island of Ireland, by utilising the **Physical Notifications**, **Interconnector Schedule Quantities** and **Merit Order** derived pursuant to ~~SDC~~**SDC**1 and the factors to be taken into account listed there and by taking into account any **NCDGU MW Output** in both cases together with an appropriate margin of reserve, whilst maintaining (so far as possible) the integrity of the **Transmission System** together with the security and quality of supply (with the **Other TSO** having a similar objective with regard to ~~it's~~ the **Other** **Transmission System**).	**Aggregated Generating Units** output (or reduction as the case may be) and/or **Interconnector** transfers to **Demand**, and thereby in conjunction with the **Other TSO**, the demand on the Island of Ireland, by utilising the **Physical Notifications**, **Interconnector Schedule Quantities** and **Merit Order** derived pursuant to **SDC**1 and the factors to be taken into account listed there and by taking into account any **NCDGU MW Output** in both cases together with an appropriate margin of reserve, whilst maintaining (so far as possible) the integrity of the **Transmission System** together with the security and quality of supply (with the **Other TSO** having a similar objective with regard to the **Other Transmission System**).
SDC2.4.1.1	Addition of 'or control' in order to reference units controllable by the TSO.	The information which the **TSO** shall use in assessing which **CDGU**, **Demand Side Unit**, **Interconnector** transfers, **Pumped Storage Plant** and/or **Aggregated Generating Units** to **Dispatch** or control, will be: […]	The information which the **TSO** shall use in assessing which **CDGU**, **Demand Side Unit**, **Interconnector** transfers, **Pumped Storage Plant** and/or **Aggregated Generating Units** to **Dispatch** or control, will be: […]
SDC2.4.1.2	Addition of 'or control' in order to reference units controllable by the TSO. Unbolding and uncapitalising of 'acceptance' which is not a defined term under the Grid Code.	Additional factors which the **TSO** will also take into account are: (a) those **Generators**, **Interconnector Operators**, **Generator Aggregators** or **Demand Side Unit Operators** who have not complied with **Dispatch Instructions** or **Special Actions** or control setpoints; (b) real time variation requests; and (c) the need to **Dispatch** or control **CDGUs**, **Aggregated Generating Units, Demand Side Units**, **Interconnector** transfers and **Pumped Storage Plant Demand** for **Monitoring, Testing** or **Investigation** purposes (and/or for other trading purposes whether at the request of a **User**, for **Commissioning** or ~~**Acceptance**~~ **acceptance**, **System Tests** or otherwise).	Additional factors which the **TSO** will also take into account are: (a) those **Generators**, **Interconnector Operators**, **Generator Aggregators** or **Demand Side Unit Operators** who have not complied with **Dispatch Instructions** or **Special Actions** or control setpoints; (b) real time variation requests; and (c) the need to **Dispatch** or control **CDGUs**, **Aggregated Generating Units, Demand Side Units**, **Interconnector** transfers and **Pumped Storage Plant Demand** for **Monitoring, Testing** or **Investigation** purposes (and/or for other trading purposes whether at the request of a **User**, for **Commissioning** or **acceptance**, **System Tests** or otherwise).

SDC2.4.1.3	Addition of 'or control' in order to reference units controllable by the TSO.	In the event of two or more **CDGUs**, **Demand Side Units**, **Pumped Storage Plant Demand** and/or **Aggregated Generating Units** having the same **Price Set** and the **TSO** not being able to differentiate on the basis of the factors identified in SDC1.4.7.2, SDC1.4.7.3 and SDC1.4.7.4, then the **TSO** will select first for **Dispatch** or control the one which in the **TSO**'s reasonable judgement is most appropriate in all the circumstances.	In the event of two or more **CDGUs**, **Demand Side Units**, **Pumped Storage Plant Demand** and/or **Aggregated Generating Units** having the same **Price Set** and the **TSO** not being able to differentiate on the basis of the factors identified in SDC1.4.7.2, SDC1.4.7.3 and SDC1.4.7.4, then the **TSO** will select first for **Dispatch** or control the one which in the **TSO**'s reasonable judgement is most appropriate in all the circumstances.
SDC2.4.2.5	Inclusion of other relevant users. Replacing 'Low Frequency Relay' with 'scheme' as this particular reference should encompass 'Special Protection Scheme, a Low Frequency Relay or any other automatic Primary Frequency Control scheme (excluding governor response) initiated response' from a relevant user. Addition of 'Active Power transfer in to the Transmission System of one of its Interconnectors, or Demand of one of its Demand Side Units,' as 'MW Output' is specific to Generation Units under the Grid Code. Replacing 'Generator' and 'CDGU' with 'User' and 'Plant' so as not to exclude other relevant users. Addition of 'or control setpoints', 'operate', 'operated, and 'or control setpoint' in order to reference units controllable by the TSO. Inclusion of 'Disconnection' for reference to users connected non-synchronously to the Transmission System.	Form of Instruction (a) Instructions may normally be given via **Electronic Interface** but can be given by telephone, by facsimile transmission. In the case of a **Special Protection Scheme**, a **Low Frequency Relay** *or any other automatic* ***Primary Frequency Control*** *scheme (excluding governor response)* initiated response from a **CDGU**, **Interconnector**, **Demand Side Unit**, and/or **Pumped Storage Plant** in relation to **Pumped Storage Plant Demand**, the instruction will be given for the effective time which is consistent with the time at which the ~~**Low Frequency Relay**~~ scheme operation occurred. This **Dispatch Instruction** will be issued retrospectively. (b) The reduction by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or increase by a **Demand Side Unit Operator** of the **MW Output** of one of its **CDGUs**, **Active Power** transfer in to the **Transmission System** of one of its **Interconnectors**, or **Demand** of one of its **Demand Side Units**, under ***Error! Reference source not found.*** shall be deemed to have followed a **Dispatch Instruction** issued by the **TSO**. (c) (i) In the event of a temporary loss of the ***NI Control Centre/National Control Centre*** as described under *OC.9*, each ~~**Generator**~~ **User** shall, subject to the provisions ofSDC2.4.2.5(c)(ii), continue to operate its ~~**CDGUs**~~ **Plant**	Form of Instruction (a) Instructions may normally be given via **Electronic Interface** but can be given by telephone, by facsimile transmission. In the case of a **Special Protection Scheme**, a **Low Frequency Relay** *or any other automatic* ***Primary Frequency Control*** *scheme (excluding governor response)* initiated response from a **CDGU**, **Interconnector**, **Demand Side Unit**, and/or **Pumped Storage Plant** in relation to **Pumped Storage Plant Demand**, the instruction will be given for the effective time which is consistent with the time at which the scheme operation occurred. This **Dispatch Instruction** will be issued retrospectively. (b) The reduction by a **Generator**, **Interconnector Operator**, **Generator Aggregator** or increase by a **Demand Side Unit Operator** of the **MW Output** of one of its **CDGUs**, **Active Power** transfer in to the **Transmission System** of one of its **Interconnectors**, or **Demand** of one of its **Demand Side Units**, under ***Error! Reference source not found.*** shall be deemed to have followed a **Dispatch Instruction** issued by the **TSO**. (c) (i) In the event of a temporary loss of the ***NI Control Centre/National Control Centre*** as described under *OC.9*, each **User** shall, subject to the provisions of SDC2.4.2.5(c)(ii), continue to operate its **Plant** in

	Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'.	in accordance with the last **Dispatch Instructions** or control setpoints to have been issued by the **TSO** but shall use all reasonable endeavours to maintain **System Frequency** at the indicated **Target Frequency** *plus or minus 0.05Hz* by monitoring **Frequency** and increasing/decreasing their **MW Output**, **Active Power** transfer, or **Demand**, ~~of its **CDGUs**~~ as necessary until such time as new **Dispatch Instructions** are received from the **TSO**. (ii) When operating its ~~**CDGUs**~~ **Plant** in the circumstances described under 0(b)(c), a ~~**Generator**~~ **User** shall never be required to ~~**Dispatch**~~ operate these units in a manner in which the **TSO** would not be entitled to require such units to be ~~**Dispatched**~~ operated by means of a **Dispatch Instruction** or control setpoint issued in accordance with this ~~SDC~~**SDC**2. (d) The **De-Synchronisation** or **Disconnection** of a **CDGU**, **Interconnector** or **Demand Side Unit** following the operation of a **Special Protection Scheme** selected by the **TSO** shall be deemed to have happened as a result of a **Dispatch Instruction** or control setpoint issued by the **TSO**.	accordance with the last **Dispatch Instructions** or control setpoints to have been issued by the **TSO** but shall use all reasonable endeavours to maintain **System Frequency** at the indicated **Target Frequency** *plus or minus 0.05Hz* by monitoring **Frequency** and increasing/decreasing their **MW Output**, **Active Power** transfer, or **Demand**, as necessary until such time as new **Dispatch Instructions** are received from the **TSO**. (ii) When operating its **Plant** in the circumstances described under 0(b)(c), a **User** shall never be required to operate these units in a manner in which the **TSO** would not be entitled to require such units to be operated by means of a **Dispatch Instruction** or control setpoint issued in accordance with this **SDC**2. (d) The **De-Synchronisation** or **Disconnection** of a **CDGU**, **Interconnector** or **Demand Side Unit** following the operation of a **Special Protection Scheme** selected by the **TSO** shall be deemed to have happened as a result of a **Dispatch Instruction** or control setpoint issued by the **TSO**.
SDC2.4.2.6	Addition of 'or control setpoints' in order to reference units controllable by the TSO. Replacing 'Generator' with 'User' and removing explicit reference to 'CDGU' so as not to exclude other relevant users. Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'. Removal of 'Low' from 'Frequency Rely' so as not to exclude high frequency relays.	**Target Frequency** (a) **Dispatch Instructions** or control setpoints to ~~**Generators**~~ **Users** will generally indicate the target MW (at **Target Frequency**) to be provided at the **Connection Point** to be achieved in accordance with the respective ~~**CDGU's**~~ **Technical Parameters** and/or parameters as provided in the **Additional Grid Code Characteristics Notices** provided under ~~SDC~~**SDC**1 or this ~~SDC~~**SDC**2, or such rate within those parameters as is specified by the **TSO** in the **Dispatch Instructions**. (b) **Dispatch Instructions** or control setpoints deemed to be given upon the operation of an agreed ~~**Low**~~	**Target Frequency** (a) **Dispatch Instructions** or control setpoints to **Users** will generally indicate the target MW (at **Target Frequency**) to be provided at the **Connection Point** to be achieved in accordance with the respective **Technical Parameters** and/or parameters as provided in the **Additional Grid Code Characteristics Notices** provided under **SDC**1 or this **SDC**2, or such rate within those parameters as is specified by the **TSO** in the **Dispatch Instructions**. (b) **Dispatch Instructions** or control setpoints deemed to be given upon the operation of an agreed **Frequency**

	Addition of 'Active Power transfer or Demand' for Interconnectors and Demand Side Units, as 'MW Output' is specific to Generation Units under the Grid Code.	**Frequency Relay** will be deemed to indicate the target MW (at **Target Frequency**), which may either be at maximum **MW Output**, **Active Power** transfer or **Demand** or at some lower **MW Output**, **Active Power** transfer or **Demand** (as previously specified by the **TSO**), to be provided at the **Connection Point** which reflects and is in accordance with the ~~**CDGU's**~~ **Technical Parameters** and/or parameters as provided in the **Additional Grid Code Characteristics Notice** data given under (or as revised in accordance with) ~~SDC~~**SDC**1 or this ~~SDC~~**SDC**2.	**Relay** will be deemed to indicate the target MW (at **Target Frequency**), which may either be at maximum **MW Output**, **Active Power** transfer or **Demand** or at some lower **MW Output**, **Active Power** transfer or **Demand** (as previously specified by the **TSO**), to be provided at the **Connection Point** which reflects and is in accordance with the **Technical Parameters** and/or parameters as provided in the **Additional Grid Code Characteristics Notice** data given under (or as revised in accordance with) **SDC**1 or this **SDC**2
SDC2.4.2.8 (d)	Addition of 'or control setpoints' in order to reference units controllable by the TSO. Replacing 'Generator' with 'User' and so as not to exclude other relevant users.	[…] (d) For the avoidance of doubt, any **Dispatch Instructions** or control setpoints issued by the **TSO** for the purposes of carrying out a test at the request of the relevant ~~**Generator**~~ **User** under *OC.8.5* or a **System Test** at the request of the relevant ~~**Generator**~~ **User** under *OC.8.6* shall not be deemed to be **Dispatch Instructions** or control setpoint given pursuant to SDC2.4.2.9.	[…] (d) For the avoidance of doubt, any **Dispatch Instructions** or control setpoints issued by the **TSO** for the purposes of carrying out a test at the request of the relevant **User** under *OC.8.5* or a **System Test** at the request of the relevant **User** under *OC.8.6* shall not be deemed to be **Dispatch Instructions** or control setpoint given pursuant to SDC2.4.2.9.
SDC2.4.2.9	Bolding and capitalising of 'Emergency' as a defined term under the Grid Code. Addition of 'or control setpoints' in order to reference units controllable by the TSO. Addition of 'e.g.' so as not to exclude any other user type scenario where a user may refuse to comply or continue to comply with instructions referred to in SDC2.4.2.9 in order to avoid an imminent risk of injury to persons or material damage to property.	(a) To preserve **System** integrity under ~~emergency~~ **Emergency** circumstances where, for example, **Licence Standards** cannot be met the **TSO** may, however, issue **Dispatch Instructions** or control setpoints to change **CDGU**, **Aggregated Generating Units**, **Demand Side Unit, Interconnector** transfers and/or **Pumped Storage Plant Demand MW Output** or **Demand Side Unit MW Response** even when this is outside parameters so registered or so amended. This may, for example, be an instruction to trip or partially load a **CDGU**. The instruction will be stated by the **TSO** to be one in relation to ~~emergency~~ **Emergency** circumstances under SDC2.4.2.9. (b) A **User** may refuse to comply or continue to comply with instructions referred to in this SDC2.4.2.9 but only in order	(a) To preserve **System** integrity under **Emergency** circumstances where, for example, **Licence Standards** cannot be met the **TSO** may, however, issue **Dispatch Instructions** or control setpoints to change **CDGU**, **Aggregated Generating Units**, **Demand Side Unit, Interconnector** transfers and/or **Pumped Storage Plant Demand MW Output** or **Demand Side Unit MW Response** even when this is outside parameters so registered or so amended. This may, for example, be an instruction to trip or partially load a **CDGU**. The instruction will be stated by the **TSO** to be one in relation to **Emergency** circumstances under SDC2.4.2.9. (b) A **User** may refuse to comply or continue to comply with instructions referred to in this SDC2.4.2.9 but only in order

		to avoid, in the ~~Generator's~~ **User's** reasonable opinion, an imminent risk of injury to persons or material damage to property (e.g. including in the case of a **Generator**, the **CDGU**).	to avoid, in the **User's** reasonable opinion, an imminent risk of injury to persons or material damage to property (e.g. including in the case of a **Generator**, the **CDGU**).
SDC2.4.2.10 (a) & (b)	Addition of 'or control setpoints', 'with respect to controllable Plant, must be implemented immediately and automatically by the Plant; or' and 'non-response' in order to reference units controllable by the TSO. Inclusion of other relevant user types. Bolding 'SDC' as the acronym of the defined term 'Scheduling and Dispatch Code'.	Communication with **Users** (a) **Dispatch Instructions** or control setpoints whether given via **Electronic Interface**, by telephone, by facsimile transmission must be: i. formally acknowledged immediately by the **User** at the **Control Facility** by **Electronic Interface**; or ii. with respect to controllable **Plant**, must be implemented immediately and automatically by the **Plant**; or iii. with the **TSO's** prior consent, by telephone, by return facsimile transmission, in the manner agreed between the **User** and the **TSO**; or iv. a reason must be given as soon as possible for non-acceptance or non-response, which may (subject to SDC2.4.2.9) only be to avoid, in the **User's** reasonable opinion, an imminent risk of injury to persons or material damage to property (including the **CDGU**, **Interconnector** or **Demand Side Unit**) or because they are not in accordance with the applicable **Availability Notice,** or **Technical Parameters**, or **Additional Grid Code Characteristics Notices** or do not reflect **Other Relevant Data** submitted by the **User** pursuant to ~~SDC~~**SDC**1. (b) In the event that in carrying out the **Dispatch Instructions** or control setpoints an unforeseen problem arises, giving rise, in the **User's** reasonable opinion, to an imminent risk of injury to persons or material damage to property (including	Communication with **Users** (a) **Dispatch Instructions** or control setpoints whether given via **Electronic Interface**, by telephone, by facsimile transmission must be: i. formally acknowledged immediately by the **User** at the **Control Facility** by **Electronic Interface**; or ii. with respect to controllable **Plant**, must be implemented immediately and automatically by the **Plant**; or iii. with the **TSO's** prior consent, by telephone, by return facsimile transmission, in the manner agreed between the **User** and the **TSO**; or iv. a reason must be given as soon as possible for non-acceptance or non-response, which may (subject to SDC2.4.2.9) only be to avoid, in the **User's** reasonable opinion, an imminent risk of injury to persons or material damage to property (including the **CDGU**, **Interconnector** or **Demand Side Unit**) or because they are not in accordance with the applicable **Availability Notice,** or **Technical Parameters**, or **Additional Grid Code Characteristics Notices** or do not reflect **Other Relevant Data** submitted by the **User** pursuant to **SDC**1. (b) In the event that in carrying out the **Dispatch Instructions** or control setpoints an unforeseen problem arises, giving rise, in the **User's** reasonable opinion, to an imminent risk of injury to persons or material damage to property (including

		the **CDGU**, **Interconnector** or **Demand Side Unit**) the **TSO** must be notified as soon as possible by telephone. […]	the **Generator**, **Interconnector** or **Demand Side Unit**) the **TSO** must be notified as soon as possible by telephone. […]
PPM1.5.3.13	Removal of 'Low' and 'or power decrease down to Minimum Load' to allow for high frequency events. Bolding and capitalising 'Disconnecting' and 'Auxiliary' as defined terms under the Grid Code,	○ PPM1.5.3.13 […] (d) In response to ~~Low~~ **Frequency Events**, **Controllable PPMs** shall be capable of providing a power increase up to **Available Active Power** or power decrease down to **Minimum Load**. Stable operation in response to ~~Low~~ **Frequency Events** shall be ensured. **Controllable PPMs** capable of acting as a load, shall be capable of ~~disconnecting~~ **Disconnecting** their load in the case of a ~~Low~~ **Frequency Event**. This requirement does not extend to ~~auxiliary supplies.~~ **Auxiliary** supplies.	○ PPM1.5.3.13 […] (d) In response to **Frequency Events**, **Controllable PPMs** shall be capable of providing a power increase up to **Available Active Power** or power decrease down to **Minimum Load**. Stable operation in response to **Frequency Events** shall be ensured. **Controllable PPMs** capable of acting as a load, shall be capable of **Disconnecting** their load in the case of a **Frequency Event**. This requirement does not extend to **Auxiliary** supplies.
PPM1.5.3.14	Bolding and capitalising 'Limited Frequency Sensitive Mode – Under-Frequency' and 'Limited Frequency Sensitive Mode – Over-Frequency' as newly proposed defined terms in this modification proposal, and as per the descriptions in the EU Connection Network Codes RfG and HVDC.	○ PPM1.5.3.14 The **Frequency Response System** shall be required to change between ~~Limited~~**Limited Frequency Sensitive Mode** – ~~Under~~**Under**-**Frequency**, ~~Limited~~**Limited Frequency Sensitive Mode** – ~~Over~~ **Over**-**Frequency**, and **Frequency Sensitive Mode** within one minute from receipt of the appropriate signal from the **TSO**. **Controllable PPMs** may be instructed to be in both ~~Limited~~**Limited Frequency Sensitive Mode** – ~~Under~~**Under**-**Frequency** and ~~Limited~~**Limited Frequency Sensitive Mode** – ~~Over~~ **Over**-**Frequency** at the same time. **Generators** shall only operate in **Frequency Sensitive Mode** when they are not operating in ~~Limited~~**Limited Frequency Sensitive Mode** – ~~Under~~**Under**-	○ PPM1.5.3.14 The **Frequency Response System** shall be required to change between **Limited Frequency Sensitive Mode** – **Under**-**Frequency**, **Limited Frequency Sensitive Mode** – **Over**-**Frequency**, and **Frequency Sensitive Mode** within one minute from receipt of the appropriate signal from the **TSO**. **Controllable PPMs** may be instructed to be in both **Limited Frequency Sensitive Mode** – **Under**-**Frequency** and **Limited Frequency Sensitive Mode** – **Over**-**Frequency** at the same time. **Generators** shall only operate in **Frequency Sensitive Mode** when they are not operating in **Limited Frequency Sensitive Mode** – **Under**-**Frequency** or **Limited Frequency Sensitive Mode Over**-**Frequency**.

		Frequency or ~~Limited~~**Limited Frequency Sensitive Mode ~~Over~~ Over-Frequency**.	
Acronyms List	New acronyms to be added to the Acronyms List section of the Grid Code	**FFR Fast Frequency Response** **RR Replacement Reserve** **SSC System Services Code**	**FFR Fast Frequency Response** **RR Replacement Reserve** **SSC System Services Code**